	RENEWABLE ENERGY CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
RENEWABLE ENERGY	Renewable		There is a potential for co-location of renewable energy infrastructure depending on type. To avoid or minimize conflicts siting such that support vessels are able to access and maneuver around infrastructure without risk of entanglement or causing damage by impact. Therefore, coordination among energy project activities is important to maximize the site potential. | After a renewable energy project is completed, a public kiosk should be displayed to teach about the benefits of renewable energy. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Potential for co-location of certain structures (Tidal and wave energy) ; wind energy cannot be co-located	Potential considerations during construction phase	Must not occupy the same space as other offshore wind projects Ensure coordination among other energy project activities in the area to maximize site potential.	Erect a public kiosk within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy. Coordinate with USCG & NOAA OCS to update nautical charts.
	Pipelines and Cables	Conditionally compatible	The placement of cables and pipelines within installations of renewable energy infrastructure is required for the transmission of generated energy from the array to onshore convertor stations. It is recommended that cables be trenched and backfilled to reduce the potential for damage that may occur from vessels or debris in the areas. For ease of maintenance and to allow other activities to occur within the area without interfering with operations, mapping the placement of the pipelines and cables is required. Renewable energy arrays may be constructed around or adjacent to existing pipelines and cables, and vice versa, as long as the proper coordination with the owners/maintainers of such infrastructure occurs to avoid damage. The co-placement of sensitive infrastructure that may limit other activities is recommended in order to maximize the use of the area. This is particularly true of the landing sites for transmission cable and pipelines to limit the impact and limitations associated with shoreline crossings to sensitive resource areas. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of same space	Potential considerations during construction phase	Cannot interfere with existing or approved pipelines and cables; avoid existing pipelines and cables unless there are opportunities to co-exist. Examine potential for utilizing same "cable landing"(?) site as existing cable, pipelines, and other offshore energy facilities.	Coordinate with USCG & NOAA OCS to update nautical charts.
	Oil & LNG	Conditionally compatible	The placement of oil or natural gas infrastructure within or through a renewable energy area, while potentially a viable option would require extensive coordination among all parties and due to operational space requirements and/or safety restrictions, the co-existence of these activities may be precluded. The co-placement of sensitive infrastructure that may limit other activities is recommended in order to maximize the use of the area. This is particularly true of the landing sites for transmission cable and pipelines to limit the impacts associated with shoreline crossings of sensitive resource areas. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; tidal/ wave energy not compatible in the same time and place; pipelines conditionally compatible	Potential considerations during construction phase	Evaluate potential for sharing infrastructure with other energy forms (Oil, LNG) Avoid establishing renewable energy areas in oil/ gas fields. Examine potential for utilizing same "cable landing" site as existing cable, pipelines, and other offshore energy facilities.	Construct using most current best management practices and safety protocols. Coordinate with USCG & NOAA OCS to update nautical charts.

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	Outfalls	Y	While they cannot physically occupy the same space, the placement of renewable energy infrastructure near or adjacent to outfalls would be possible with the proper coordination. Coordination with the US Coast Guard should be conducted to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	While they cannot Physical occupy of same space, coordination would allow use of adjacent spaces.	Potential considerations during construction phase	Avoid current and proposed outfall locations; Coordinate to avoid impacts to existing or proposed wave/current turbines; ensure placement of infrastructure does not interfere with dispersal of effluent from outfall	Coordination with the US Coast Guard should be conducted to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Maritime	Dredging	N	Renewable energy infrastructure and dredging are not compatible activities. When siting renewable energy infrastructure, potential sand/gravel resource extraction sites and areas requiring dredging, such as navigation channels, should be avoided as dredging may undermine or damage the infrastructure and the infrastructure may limit access to limited sand and gravel resources. To maximize compatibility, transmission cables associated with renewable energy should avoid shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. The top of the cable crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location.	Physical occupation of space; Transmission cables	Potential considerations during construction phase; Adherence to dredging windows	Renewable energy infrastructure should avoid existing potential sand/gravel resource extraction sites; and navigation channels.	Establish dredging exclusion zone around renewable energy infrastructure.
	Ports	Conditionally compatible	The siting of primary renewable energy infrastructure is not compatible with port operations as structures above or in the water increases the potential for interference with navigation safety. The utilization of ports as a landing site for associated infrastructure (i.e. transmission cables) may occur if cables and transmissions lines could be trenched or directionally bored to a depth sufficient to avoid damage to the cables and to not interfere with maintenance dredging operations.	Physical occupation of space; interference with navigation safety	Potential considerations during construction phase	Siting must consider safety of navigation and commercial impacts (transportation and delivery of goods). Consider transmission cable landings within ports.	Coordinate siting with port and port stakeholders to avoid impacts. Coordinate with USCG & NOAA OCS to update nautical charts.

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	Vessels	Conditionally compatible	The operation of vessels near renewable energy infrastructure must be limited and conducted with caution to avoid negative impacts to the either the vessels or the infrastructure. Vessel size and type should be restricted within a wind turbine array to ensure adequate maneuverability to prevent collision with the infrastructure. A buffer should be established around wave energy collection devices in which vessel operation should be prohibited to prevent interference with navigation safety (e.g. collision, entanglement). Tidal turbines should be installed at a depth such that vessels of reasonable drafts could pass over without risk of entanglement. When siting renewable energy infrastructure, coordination should be conducted to avoid siting in areas of high vessel traffic (e.g. recreation areas, navigation routes).	Physical occupation of space; interference with navigation safety		Renewable energy infrastructure should not be sited within navigation channels, anchorages or obstruct ATON; Coordinate with coast guard to reduce impacts to future vessel uses.	Coordinate with USCG & NOAA OCS to update nautical charts. Appropriate mitigation measures must be used to during and after construction to promote navigation safety; armor and bury cables in areas where anchoring and scouring may occur; implement mariner education; and exploration of technology upgrades to mitigate some radar issues; coordinate with federal authorities to determine vessel type restrictions, anchoring in energy areas is prohibited.
	Anchorages	N	Renewable energy infrastructure and anchorages are incompatible activities due to increased risks to navigation safety, entanglement or damage to infrastructure.	Physical occupation of space; interference with navigation safety and impacts to infrastructure		Renewable energy infrastructure should avoid existing and proposed anchorages.	
	Vessel Routes/ATON	Conditionally compatible	The placement of renewable energy infrastructure in or near established vessel routes is not compatible due to risks to navigation safety, including collision and entanglement, and the potential damage that may be caused to the renewable energy infrastructure. Ensuring the placement of proper Aids to Navigation is necessary when siting energy infrastructure. | When siting renewable energy infrastructure, avoid siting in areas of high vessel traffic (e.g. recreation areas, navigation routes). Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas in or around the energy infrastructure and to ensure placement of proper aids-to-navigation.	Physical occupation of space; conflict with renewable energy facilities, interference with navigation safety and impacts to infrastructure;	Potential considerations during construction phase	Coordinate with USCG to reduce conflicts with vessel navigation routes and reposition ATONS if necessary; do note site new renewable energy infrastructure in existing navigation routes;	Coordinate with USCG & NOAA OCS to update nautical charts. Appropriate mitigation measures must be used to during and after construction to promote navigation safety; armor and bury cables in areas where anchoring and scouring may occur; implement mariner education and exploration of technology upgrades to mitigate some radar issues; coordinate with federal authorities to determine vessel type restrictions, anchoring in energy areas is prohibited.
	Security	Conditionally compatible	With proper coordination, renewable energy infrastructure could be compatible in certain security restriction zones as these areas are already restricted to most other activities. Restricted zones with unexploded ordinances should be avoided and renewable energy infrastructure should not interfere with security or military activities. All nautical chart updates should be coordinated with USGS and NOAA OCS.	Renewable energy infrastructure could be compatible in restricted areas assuming proper coordination with responsible party enacting area	Potential considerations during construction phase	Cannot interfere with current security or military activities. Avoid restricted zones with unexploded ordnance.	Coordinate siting with agency responsible for areas restrictions. Coordinate with USCG & NOAA OCS to update nautical charts.

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				restrictions, excluding areas of unexploded ordnances.			
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally compatible	Several potential conflicts exist between pelagic fishing gear and renewable energy. Pelagic fishing gear is not compatible with wave or tidal energy due to possible gear entanglement with these types of energy structures. Wind energy infrastructure could potentially be compatible with pelagic fishing gear through active coordination between permitting and resource agencies and fishermen. To reduce or avoid conflicts important fishery grounds conduct with agencies can reduce or prevent siting energy areas in and recommend time of year restrictions for construction to reduce impacts to recreational and commercial fishing activities. There is a potential for wind energy infrastructure to create unique habitat for commercially important fish species and aid the increase of important species due to fishing restrictions around energy infrastructure. An education program should also be implemented for commercial and recreational fishermen to explain infrastructure restrictions and reduce impacts to renewable energy infrastructure. All nautical chart updates should be coordinated with USGS and NOAA OCS.	Location dependent, Conditionally compatible with wind energy infrastructure, not compatible with wave or tidal. Physical occupation of space; gear entanglement, fishing exclusions; increase of commercially important species due to fishing restrictions; potential loss/gain to commercial enterprise and recreation	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordinate with NOAA NMFS, MAFC, and DNREC DFW to reduce or avoid siting energy areas in important fishery grounds.	Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to renewable energy infrastructure. Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.
	Fishing Gear (Bottom)	N	Renewable energy infrastructure and bottom fishing gear are not compatible in the same location. Conflicts include gear entanglement, fishing exclusion zones and impacts to the energy infrastructure. Coordination between FERC, NOAA NMFS, MAFMC, DNREC DFW and fishermen can reduce impacts with siting energy areas in important fishery grounds and can establish recommend time of year restrictions for construction to reduce impacts to recreational and commercial fishing activities. An education program should also be implemented for commercial and recreational fishermen to explain infrastructure restrictions and reduce impacts to renewable energy infrastructure. All nautical chart updates should be coordinated with USGS and NOAA OCS.	Physical occupation of space; gear entanglement, fishing exclusion zones, impacts to infrastructure.	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordinate with NOAA NMFS, MAFC, and DNREC DFW to reduce or avoid siting energy areas in important fishery grounds.	Trawling, bottom fishing and anchoring is not allowed within energy areas; Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to renewable energy infrastructure. Coordinate with federal authorities to determine vessel type restrictions. Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.

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	Aquaculture	Conditionally compatible	With proper coordination, there is potential to site renewable energy areas depending on the type of aquaculture production and the type of energy infrastructure proposed. To accommodate duel use of the area, early coordination with FERC, NOAA NMFS, MAFC, DNREC DFW is strongly recommended. All nautical chart updates should be coordinated with USGS and NOAA OCS to include both uses within the same area.	Potential to accommodate aquaculture activities around wind energy areas	Potential considerations during construction phase	Coordinate with NOAA NMFS, MAFC, and DNREC DFW to promote duel use of areas for both activities.	Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.
	Swimming/ Diving	Conditionally compatible	Compatibility of swimming and diving and renewable energy is conditionally dependent on the location and the type and location of energy infrastructure. Swimming and diving should be restricted in tidal or wave energy areas. To maximize compatibility, coordination between agencies and stakeholder should begin early in the development process and tidal and wave energy areas should not be constructed within designated swimming areas heavily utilized for recreation. A public kiosk should be created within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to swimming and diving. All nautical charts should be updated through coordination with USCG and NOAA OCS.	Conditionally dependent on renewable energy type (wind) and draft of associated vessel. Physical occupation of space; water quality and clarity during construction;	Potential considerations during construction phase; long term impacts greatest during swimming/diving seasons	Do not construct tidal and wave energy areas in designated swimming area. Coordinate with	Painting scheme must maximize safety; Erect a public kiosk within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to swimming and diving. Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.
	Surface Water Sports	Conditionally compatible	Compatibility of surface water sports and renewable energy depends on several conditions: type of renewable energy, vessel draft, location of the energy area and potential exclusion zones. Tidal and wave energy areas should not be constructed areas heavily utilized for surface water sports to prevent entanglement or other navigation safety issues. To maximize compatibility, coordination between agencies and stakeholder should begin early in the development process. A public kiosk should be created within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to swimming and diving. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Conditionally dependent on renewable energy type (wind and tidal) and draft of vessel. Physical occupation of space (wind and wave infrastructure); exclusion zones; risks include potential entanglement or navigation safety wind and wave infrastructure.	Potential considerations during construction phase; long term impacts greatest during peak recreational season.	Evaluate potential sites, identifying those more heavily utilized for surface water recreation and consider avoid or reducing impacts to those areas.	Maintain open dialogue with stakeholder organizations to maximize compatibility and reduce risk. Painting scheme must maximize safety; Erect a public kiosk within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to surface water sports. Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.

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	Boating	Conditionally compatible	Potential conflicts exist between boating and renewable energy infrastructure due to risk to navigation safety and damage to the infrastructure. To maximize compatibility, recreational use data should be used to identify areas most heavily used by boaters to prevent interference with navigation safety and reduce impacts to the areas during construction. Vessel type restrictions, exclusion zone limitations and prohibiting anchors in renewable energy areas should be coordinated with federal authorities. The painting scheme of renewable energy infrastructure should maximize safety, but minimize visual impacts. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; exclusion zones; risks include potential entanglement or interference with navigation safety,	Potential considerations during construction phase; long term impacts greatest during boating season.	Evaluate potential sites, identifying those more heavily utilized for boating and consider avoid or reducing impacts to those areas.	Review recreational use data to identify those areas most heavily used by boaters. Leisure and fishing craft can move through the wind energy area during the operational period; not allowed to create exclusion zones that would prevent sailing within wind farm site; painting scheme must maximize safety, but minimize visual impact; all oil filled equipment would be fully bundled to ensure no spillage in the event of a leak or puncture in any vessels or the offshore substation; to the extent possible, coordinate with federal authorities to determine vessel type restrictions. Educate boaters on safety practices when operating around renewable energy areas. Anchoring in energy areas is prohibited.
	Hunting	Conditionally compatible	Compatibility of hunting and renewable energy depends on several conditions: type of renewable energy, vessel draft, location of the energy area and potential exclusion zones. Tidal and wave energy areas should not be constructed areas heavily utilized for hunting to prevent entanglement or other navigation safety issues. To maximize compatibility, recreational use data should be used to identify areas most heavily used by hunters to prevent interference with navigation safety and reduce impacts to the areas during construction. Vessel type restrictions, exclusion zone limitations and prohibiting anchors in renewable energy areas should be coordinated with federal authorities. The painting scheme of renewable energy infrastructure should maximize safety, but minimize visual impacts. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Hunter education programs should include safety practices when operating around and within renewable energy areas.	Conditionally dependent on renewable energy type (tidal) and draft of vessel. Physical occupation of space; risk of gear entanglement and navigation safety; exclusion zones.	Potential considerations during construction phase; long term impacts greatest during hunting season.	Evaluate potential sites, identifying those more heavily utilized for hunting and consider avoid or reducing impacts to those areas.	Review recreational use data to identify those areas most heavily used by hunters. Create exclusion zone for firearm use, painting scheme must maximize safety, but minimize visual impact; all oil filled equipment would be fully bundled to ensure no spillage in the event of a leak or puncture in any vessels or the offshore substation; to the extent possible, coordinate with federal authorities to determine vessel type restrictions. Educate hunters on safety practices when operating around and within renewable energy areas. Anchoring in energy areas is prohibited. Coordinate with USCG & NOAA OCS to update nautical charts.

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Habitat & Organisms	Air	Conditionally compatible	Compatibility of renewable energy and air (habitat and organisms) is dependent on the type of renewable energy infrastructure and is reliant upon coordination with permitting and resource agencies. Wind energy infrastructure can increase wind turbidity and noise and create a barrier that would influence migratory behavior of birds, bats and butterflies. Other forms of renewable energy, such as wave and tidal, would not have the same impacts. |To maximize compatibility between renewable energy and air (habitat and organisms) several factors should be considered. Wind farms should not be established in conservation and protection areas. Existing data should be evaluated to identify migration, breeding or other heavily utilized areas to avoid or minimize impacts. Multi-year analysis of avian use should be conducted before, during and after construction and include species specific use and population data. Resource management offices should coordinate with permitting agencies to identify and implement best management practices to reduce negative impacts to species and include lighting on wind farms to minimize attraction, while meeting aviation standards. Construction of renewable energy infrastructure may include the following: time of year restrictions for migration and breeding; noise level monitoring; operating associated maintenance and construction vessels in a manner to ensure efficient fuel use and minimize air quality impacts; and adherence to specific construction methods to minimize environmental impacts.	Physical occupation of space (wind farms); creation of a barrier; air turbidity; noise; new roosting habitat; interference of migratory behavior (navigation lights, turbine blades) ;*other types of renewable energy would not have the same impacts (wave, tidal); interface with navigation safety (collision and radar)*	Temporary impacts to air quality during construction; proximity to migratory species pathways (birds, bats and butterflies); more significant spatial/temporal impacts during migration and construction	Wind farms not allowed in conservation & protection areas. Evaluate existing data to identify migration, foraging, breeding or other heavily utilized areas and minimize impacts or avoid. Evaluate existing data to identify migration, foraging, breeding or other heavily utilized areas and minimize impacts or avoid. Wind farms not allowed in conservation & protection areas.	Coordinate with resource management offices identify and implement BMPS to reduce negative impacts to species utilizing the areas including lighting on wind farms to minimize attraction, while meeting aviation standards; secure air quality offsets for construction emission impacts; vessels must be maintained to ensure efficient fuel use and minimize air quality impacts; monitor noise levels; conduct a multi-year analysis of avian use (before, during and after construction), and include species-specific uses and population; adhere to specific construction methods to minimize environmental impact; migration and breeding time of year restrictions during construction; avoid population level impacts. Coordinate with USCG & NOAA OCS to update nautical charts.

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	Water	Conditionally compatible	Compatibility of renewable energy and water (habitat and organisms) is dependent on the type of renewable energy infrastructure and is reliant upon coordination with permitting and resource agencies. Wind and tidal energy infrastructure can increase noise and vibrations that may affect the activities of pelagic species. Wave and tidal infrastructure could create a physical risk to species utilizing the area. |To maximize compatibility between renewable energy and water (habitat and organisms) several factors should be considered. Energy infrastructure should not be established in conservation and protection areas. Existing data should be evaluated to identify migration, breeding or other heavily utilized areas to avoid or minimize impacts. Resource management offices should coordinate with permitting agencies to identify and implement best management practices to reduce negative impacts to species. Construction of renewable energy infrastructure may include the following: time of year restrictions for migration and breeding; noise/vibration level monitoring; operating associated maintenance and construction vessels in a manner to ensure efficient fuel use and minimize water quality impacts; and adherence to specific construction methods to minimize environmental impacts. Renewable infrastructure may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality.	Physical occupation of space (creation of barrier); vibrations; contamination from anti-fouling paint, vessels and equipment; noise during construction and operation; turbidity; potential increase of fish species diversity, creation of artificial reef; habitat conversion; accidental release of trash and marine debris (during construction) ; risk of fuel spills from construction vessels; impacts to water currents and recruitment of invertebrates.	Potential considerations during construction phase; long term impacts greatest during migration and spawning. Accidental release of marine debris & risk of fuel spills from construction vessels.	Wind farms not allowed in conservation & protection areas. Evaluate existing data to identify migration, foraging, breeding or other heavily utilized areas and minimize impacts or avoid.	All oil filled equipment is fully bundled to ensure no spillage in the event of a leak or puncture in any vessels or offshore substation; a waste management plan must be provided before construction; monitor the impacts of vibrations; minimize risks through the application of best management practices for construction and operation; include time of year restrictions during construction and siting; insulate cables to reduce the impact of the magnetic field; TBT based anti-fouling paint would not be used on the submerged surfaces - instead, mussels and barnacles would be removed by scraping; adhere to specific construction methods (soft start pile driving, buddle curtains etc.) to minimize environmental impact; to prevent corrosion, sacrificial aluminum based anodes may be placed on foundations (wind). Coordinate with USCG & NOAA OCS to update nautical charts.
	Bottom	Conditionally compatible	Compatibility of renewable energy and bottom (habitat and organisms) is dependent several factors including the proximity to sand borrow sites, essential fish habitats, and migration corridors. Some negative impacts to bottom (habitat and organisms) from renewable energy includes the structure creating a barrier and disrupting sediment transport or migration, the loss of habitat from placement and scouring, permanent and temporary (construction) increases turbidity and vibration. |To maximize compatibility, wind turbines and benthic infrastructure associated with tidal and wave energy collection should not be sited in conservation and protection area. Coordination with resource agencies should be conducted to minimize impacts or avoid areas heavily utilized for migration, foraging and breeding. During construction, preventative measures should be taken to reduce environmental impacts. Preventative measures could include insulating cables to reduce magnetic fields; armoring and burying cables in areas where anchoring and scouring may occur; ensuring power cables use an alternative non-oil based solid insulator; and	Physical occupation of space (creation of barrier); disruption of sediment transport; loss of habitat from scouring; turbidity; vibrations; sand borrow sites; contamination from anti-fouling paint from vessels and equipment; electromagnetic field; potential to create new habitat type.	More significant spatial impacts during spawning, migration and construction. Long term impacts may be greater during seasonal migrations of bottom-dwellers.	Wind farms not allowed in conservation & protection areas. Evaluate existing data to identify migration, foraging, breeding or other heavily utilized areas and minimize impacts or avoid.	Power cables use alternative non-oil based solid insulator; armor and bury cables in areas where anchoring and scouring may occur; insulate cables to reduce the impact of the magnetic field Coordinate with USCG & NOAA OCS to update nautical charts.

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			avoid using tributyltin (TBT) based anti-fouling paint. All nautical charts should be updated through coordination with USCG and NOAA OCS.				
Resources	Cultural/Historical	N	Cultural and historical resources are conditionally compatible with renewable energy depending on the type of energy infrastructure proposed and the resource(s) in the proposed location. The siting of wind turbines will cause the most impacts to resource site and may preclude compatibility. Detailed coordination with state and federal historic offices and local and regional tribes should take place during the planning process to avoid impacting important sites.	Physical occupation of space; Impairment of cultural or historical sites; damage to important sites		Coordinate with state and federal historic offices determine historical/cultural impacts at sites, avoid impacts to important sites and resource.	Include local/regional tribes in the planning process
	Viewscape	Conditionally compatible	Viewscapes are conditionally compatible with renewable energy depending on the type of energy infrastructure proposed and the proposed sites distance from shore. Wind turbines will have the most visual impact. To minimize conflict, coordination with potential communities or stakeholders impacted by project should begin during the initial phase of the project. Examples of ways to minimize visual impacts include orientating energy structures to have the most narrowed edge facing the shore, setting a site off shore and using a visually appealing painting scheme.	Distance from shore could impact viewscapes; wave/tidal energy would not have a viewscape impact	Potential for increase visual impacts during construction phase.	set a site distance off shore to avoid visual impacts	Coordinate with potential communities or stakeholders impacted by project. Orientate project so that the most narrowed edge faced shore; minimize visual impacts when seen from land. Use painting scheme to minimize visual impacts.

	PIPELINES AND CABLES CONSIDERATIONS						
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Infrastructure	Renewable	Conditionally compatible	The placement of cables and pipelines within installations of renewable energy infrastructure is required for the transmission of generated energy from the array to onshore convertor stations. It is recommended that cables be trenched and backfilled to reduce the potential for damage that may occur from vessels or debris in the areas. For ease of maintenance and to allow other activities to occur within the area without interfering with operations, mapping the placement of the pipelines and cables is required. Renewable energy arrays may be constructed around or adjacent to existing pipelines and cables, and vice versa, as long as the proper coordination with the owners/maintainers of such infrastructure occurs to avoid damage. The co-placement of sensitive infrastructure that may limit other activities is recommended in order to maximize the use of the area. This is particularly true of the landing sites for transmission cable and pipelines to limit the impact and limitations associated with shoreline crossings to sensitive resource areas. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of same space	Potential considerations during construction phase;	Coordinate to avoid or reduce interference with existing or approved pipelines and cables; avoid existing pipelines and cables unless there are opportunities to co-exist. Examine potential for utilizing same cable landing site as existing cable, pipelines, and other offshore energy facilities.	Coordinate with USCG & NOAA OCS to update nautical charts.
	Pipelines and Cables	Y	Pipelines and cables are able to co-exist in the same general area. As pipelines have exclusion zones and limitations, siting pipelines and cables near existing similar infrastructure would be supported as it maximizes use of space that would otherwise have limited use. Coordination between responsible agencies should be conducted to ensure potential co-location of pipelines and cables avoids interference with current cables & pipelines. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Interference with other cables; opportunity for co-location	Potential considerations during construction phase	Site route to minimize impacts to existing cables, coordinate to maximize compatibility, space utilization and potential for cable landing sites.	Coordinate with USCG & NOAA OCS to update nautical charts.
	Oil & LNG	Conditionally compatible	Pipelines and cables are necessary components of oil and natural gas infrastructure. As they may have similar exclusion zones and limitations, siting pipelines and cables near oil and natural gas infrastructure would be supported as it maximizes use of space that might otherwise be limited. Compatibility of additional pipelines and cables with oil and LNG is dependent on location of the infrastructure and construction methods. To maximize compatibility, coordination between responsible agencies should occur to avoid or reduce interference with existing structures, identify potential opportunities to co-locate and examine the potential for utilizing the same onshore landing sites. Construction should use the most current best management practices and safety protocols. Coordination with the US Coast	Physical occupation of space; possibility to co-locate	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved pipelines and cables; avoid existing pipelines and cables unless there are opportunities to co-exist. Examine potential for utilizing same onshore landing sites site as existing cable, pipelines, and other offshore energy facilities.	Construct using most current best management practices and safety protocols. Coordinate with USCG & NOAA OCS to update nautical charts.

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	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.				
	Outfalls	Y	The placement of pipelines and cables near outfall pipes is conditionally compatible. As they may have similar exclusion zones and limitations, siting pipelines and cables near outfalls would be supported as it maximizes use of space that would otherwise have limited use. To ensure compatibility, coordination between responsible agencies should consider the following: avoid or reduce interference with existing pipelines and cables including additional spacing requirement necessary to maintain infrastructure and examine the potential for utilizing the same onshore landing sites. Construction should use the most current best management practices and safety protocols. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; opportunities to co-locate	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved outfalls; avoid existing outfalls unless there are opportunities to co-exist.	Cables must be "armored" and buried in areas where anchoring or scouring might occur, Coordinate with USCG & NOAA OCS to update nautical charts.
Maritime	Dredging	Conditionally Compatible	Dredging is required for the construction and placement of some cable and pipelines infrastructure. However, coordination should occur to avoid improper placement of pipelines and cables which can interfere with maintenance dredging operations and may result in damage or undermining of pipeline and cable infrastructure. To maximize compatibility, pipelines and cable routes should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space	Potential considerations during construction phase; Adherence to dredging windows	Pipelines and cables routes selected to consider avoiding shipping channels and navigation routes; Cables must be buried to prevent interference with dredging activities.	The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft. feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft. feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordinate with USCG & NOAA OCS to update nautical charts.

	PIPELINES AND CABLES CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Ports	Conditionally compatible	Locating cables and pipelines within ports is conditionally compatible. Coordination between stakeholders and permitting agencies is required to avoid risks to navigation and interference with port operations such as maintenance dredging. To maximize compatibility, pipelines and cable routes should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The utilization of existing cable and pipeline landing sites within ports should be examined for future cable and pipelines. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential conflicts with the development of new ports; interference with navigation safety.	Potential considerations during construction phase or repair of cables/pipelines; impacts to navigation safety.	Site route to minimize impacts to existing port. Coordinate with port authorities to minimize impacts to port operations and prevent damage to vessels. Coordinate to utilize existing cable/pipeline landing sites in ports.	Cables must be "armored" and buried in areas where anchoring or scouring might occur; The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft. feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft. feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordinate with USCG & NOAA OCS to update nautical charts.
	Vessels	Conditionally compatible	Without adequate coordination between responsible agencies and stakeholders, additional pipelines and cables could create spatial conflicts with vessels, including displacement of shipping activities from exclusion zones around a pipeline and interference with navigation safety. To maximize compatibility, pipelines and cables should consider avoiding vessel routes. If vessel routes cannot be avoided, the top of the cable or pipeline should be located a minimum of 4 feet below the existing bottom elevation and backfilled with suitable heavy material to a preconstruction bottom elevation. USCG should be contacted before construction to notify vessel operators of precautions to use when operating near installation equipment. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; Displacement of shipping activities within exclusion zone around pipeline; interference with navigation safety.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordinate with shipping stakeholders to minimize impacts to vessel operation and navigation.	Cables must be "armored" and/or buried to avoid vessel impacts. Bury cables in areas where maintenance dredging will be required. Coordinate with USCG & NOAA OCS to update nautical charts.

	PIPELINES AND CABLES CONSIDERATIONS						
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	Anchorages	N	Pipelines and cable should not be installed within anchorages. These uses cannot occupy the same location due to the potential for damaging pipelines and cables while anchoring.	Physical occupation of space; potential for damaging pipelines and cable when anchoring		Avoid siting cables and pipelines in anchorages	
	Vessel Routes/ATON	Conditionally compatible	Locating pipelines and cables in or near vessel routes is conditionally compatible. Coordination with stakeholders and permitting agencies must be conducted in order to reduce the potential conflict created by these activities. Potential conflicts include creation of exclusion zones and displacement of vessel activities during construction or maintenance which may result in interference with navigation safety and an increase water congestion and damage to pipelines and cables resulting from vessel activity or maintenance dredging. If vessel routes cannot be avoided, the top of the cable or pipeline should be located a minimum of 4 feet below the existing bottom elevation and backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Additional coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with USGS should include minimizing or avoiding impacts to vessel traffic and current or proposed ATONS notifying vessel operators of precautions to use when operating near installation equipment. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential for damaging pipelines and cable when anchoring; potential conflicts when maintaining vessel routes	Displacement of vessel activities during construction; exclusion zones around construction/maintenance vessels may increase water congestion; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordination with USCG to minimize or avoid impact to vessel traffic and current or proposed ATONs. Coordinate with USACE to ensure proper placement and protection of pipelines and cables.	The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft. feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft. feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordinate with USCG & NOAA OCS to update nautical charts.
	Security	Y	With thorough coordination with the agency responsible for security area restrictions, pipelines and cables would be compatible within security zones. As they may have similar exclusion zones and limitations, siting pipelines and cables in or near security areas may be supported as it maximizes use of space that would otherwise have limited use. The responsible agency for security zones should be included in planning and construction of new pipelines and cables to minimize impacts. Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.		Potential considerations during construction phase; coordinate with agency responsible for area restrictions for construction activities	Site route to minimize impacts within or to avoid security zones; avoid restricted areas.	Coordinate siting with agency responsible for areas restrictions. Coordinate with USCG & NOAA OCS to update nautical charts.

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Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally compatible	The use of pelagic fishing gear near pipelines and cables is conditionally compatible. Coordination with stakeholders and resource and permitting agencies must be conducted in order to reduce the potential conflict created by these activities. Spatial conflicts include the creation of exclusion zones and displacement of fishing activities during construction or maintenance. Unburied pipelines and cables can damage and interfere with fishing gear. Coordination with resource agencies should include consideration for impacts to commercial and recreational fisheries, during and post construction; impacts to vessels operators during construction and avoidance or minimization of impacts to important fishery grounds. Post construction monitoring should be implemented to determine the impacts of pipelines and cables to fish species. Fishing vessels should be prohibited from anchoring along the pipeline corridor and pipelines should be buried and armored to avoid damage from fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Unburied cables and pipelines can interfere with/ damage fishing gear; displacement of fishing activities within exclusion zone around pipeline.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordinate with NOAA NMFS, MAFC, DNREC DFW to reduce or avoid siting pipelines and cables in important fishery grounds.	Evaluate placement of pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear. Coordinate with USCG & NOAA OCS to update nautical charts.
	Fishing Gear (Bottom)	Conditionally compatible	The use of bottom fishing gear near pipelines and cables is conditionally compatible. Coordination with stakeholders and resource and permitting agencies must be conducted in order to reduce the potential conflict created by these activities. Spatial conflicts include the creation of exclusion zones and displacement of fishing activities during construction or maintenance. Unburied pipelines and cables can be damage or undermine by many types of bottom fishing gear. Additional fishing gear can become entangled or damage by exposed pipelines. Coordination with resource agencies should include consideration for impacts to commercial and recreational fisheries, during and post construction; impacts to vessels operators during construction and avoidance or minimization of impacts to important fishery grounds. Post construction monitoring should be implemented to determine the impacts of pipelines and cables to fish species. Fishing vessels should be prohibited from anchoring along the pipeline corridor and pipelines should be buried and armored to avoid damage from fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Potential physical occupation of space; buried cables and pipelines should not interfere with bottom fishing activities; unsubmerged cables can interfere with fishing gear; gear entanglement; displacement of fishing activities within exclusion zone around pipeline.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordinate with NOAA NMFS, MAFC, DNREC DFW to reduce or avoid siting pipelines and cables in important fishery grounds.	Evaluate placement of pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear. Coordinate with USCG & NOAA OCS to update nautical charts.

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	Aquaculture	Conditionally compatible	Aquaculture and pipelines and cables are conditionally compatible activities. Both aquaculture and pipelines and cables have exclusion zones and limitations, which may preclude siting in same location. Close proximity of these two uses risks potential impacts to aquaculture if emergency or unscheduled maintenance to pipelines and cables is required. The potential risk of contamination of aquaculture sites in close proximity to damaged pipelines and cables should be evaluated. Coordination between stakeholders and responsible agencies is necessary to determine placement of pipelines and cables to minimize disturbance to siting, construction and maintenance operations. Aquaculture gear type must be compatible for use near pipelines and cables to reduce potential damage to the infrastructure. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of the same space, both activities have exclusion zone limitations	Coordination is necessary during construction phase;	Coordinate with stakeholders to minimize disturbance of each operation type for siting, construction, and maintenance. Placement of aquaculture sites in close proximity to pipelines and cables risk impacts if emergency/unscheduled maintenance is required. Evaluate potential risk of contamination to aquaculture facility if pipeline damaged.	Aquaculture facility equipment and gear type must be compatible for use near pipelines and cables to reduce potential damage to infrastructure.
	Swimming /Diving	Conditionally compatible	Swimming and diving is conditionally compatible in areas near pipelines and cables. When possible swimmers and divers should avoid areas at or near pipelines and cables, unless they understand and assume the potential risks associated with these areas. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving. Restriction zones should be created around unburied pipelines and cables for the safety of both the recreational users and the pipeline infrastructure. Educational signage or materials should be posted to warn areas users of the risks associated with pipelines and cables. Coordination between stakeholder groups and responsible agencies should be conducted to reduce impacts during peak recreational seasons and avoid popular recreation or tourism sites. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Minor risks associated with swimming/diving near cable/pipeline infrastructure; swimming and diving should be avoided around landing sites.	Potential considerations during construction phase; long term impacts greatest during swimming/diving seasons. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas most for swimming and diving. Create exclusion zones for safety. Increase swimmer/diver safety by providing signage detailing risks associated with activities around pipelines and cables. Clearly post signs in areas where swimming and diving is prohibited. Coordinate with USCG & NOAA OCS to update nautical charts.
	Surface Water Sports	Conditionally compatible	Surface water sports and pipelines and cables are conditionally compatible activities. To increase surface water sports safety, signs should be clearly posted in prohibited areas with information detailing risks associated with activities around pipelines and cables. Unburied pipelines and cables could interfere with surface water safety, particularly near landfall areas. Recreational use data should be evaluated to identify and avoid areas heavily used for surface water sports. Restriction zones should be created around unburied pipelines and cables for the safety of both the recreational users and the pipeline infrastructure. Coordination between stakeholder groups and	Unburied cables can interfere with surface water sport safety, physical occupation of space,	Potential considerations during construction phase; long term impacts greatest during peak recreational season. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas most for boating. Create exclusion zones for safety. Increase surface water sports safety by providing signage detailing risks associated with activities around pipelines and cables. Clearly post signs in areas where surface water sports is prohibited. Coordinate with USCG & NOAA OCS to update nautical charts.

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			responsible agencies should be completed to reduce impacts during peak recreational seasons and avoid popular recreation or tourism sites. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.				
	Boating	Conditionally compatible	Boating and pipelines and cables are conditionally compatible activities. Unburied pipelines and cables have the potential to interfere with boating safety. To increase boating safety, exclusion zones should be created and pipelines and cables must be armored and buried in areas where anchoring and scouring may occur. Recreational use data should be evaluated to identify areas heavily used for boating activities. Coordination between stakeholder groups and responsible agencies should be completed to reduce impacts during peak recreational seasons and avoid popular recreation or tourism sites. Boating education should include safety practices when operating around pipelines and cables or landing sites. Construction of new pipelines and cables should be limited or postponed during peak recreational seasons. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Unburied cables and pipelines have the potential to interfere with boating; particularly near landing locations; physical occupation of space, interference to navigation safety	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas most for surface water sports. Create exclusion zones for safety. Cable routes must be "armored" and buried in areas where anchoring or scouring might occur. Educate boaters on safety practices when operating around cable and pipeline areas or landing sites. Coordinate with USCG & NOAA OCS to update nautical charts.
	Hunting	Conditionally compatible	Hunting and pipelines and cables are conditionally compatible activities. Unburied pipelines and cables have the potential to interfere with boating safety, particularly near landing stations. To increase hunting safety, exclusion zones for firearm use should be created and pipelines and cables must be armored and buried in areas where anchoring and scouring may occur. Recreational use data should be evaluated to identify areas heavily used by hunters. Coordination between stakeholder groups and responsible agencies should be completed to reduce impacts during hunting seasons. Hunting education should include safety practices when operating around pipelines and cables or landing sites. Construction of new pipelines and cables should be avoided during hunting seasons. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of	Unburied cables and pipelines have the potential to interfere with boating; particularly near landing locations; physical occupation of space, interference to navigation safety;	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during hunting seasons. Evaluate sites to avoid designated hunting sites.	Review recreational use data to identify those areas most heavily used by hunters. Create exclusion zone for firearm use. Cable routes must be "armored" and buried in areas where anchoring or scouring might occur. Educate hunters on safety practices when operating around cable and pipeline areas or landing sites. Coordinate with USCG & NOAA OCS to update nautical charts.

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			proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range. Duck hunters should use extreme caution when selecting the direction they shoot.				
Habitat & Organisms	Air	Y	Cables and pipelines are compatible with the Air (habitat and organisms). Coordination with permitting agencies for pipeline and cable projects is necessary to identify and implement BMPs to avoid or minimize air pollutants during construction. Before construction, appropriate mitigation measures should be identified as related to harassment thresholds for construction and noise.		Potential considerations during construction phase; air pollution impacts from vessels during construction; avoid listed species and marine mammals during construction; identify appropriate mitigation measures as they relate to harassment thresholds for construction activities and noise		Coordinate with DNREC Division of Air Quality and EPA Region III to identify and implement BMPs to avoid or minimize air pollutants at landing sites. Develop and implement lighting plan to reduce impact on avian species.
	Water	Conditionally Compatible	Cables and pipelines are conditionally compatible with the Water (habitat and organisms). Activities could result in increased water pollution due to discharge, seepage or rupture of pipelines; noise and vibrations; and, during construction, increased turbidity. Coordination with state and federal fisheries and wildlife offices will provide the opportunity to select routes that will avoid sensitive habitats and reduce impacts to organisms in close proximity to the pipelines and cables. Water quality permitting offices need to be included in the planning process to ensure adequate BMPs are utilized and water quality standards within the state are not exceeded. To reduce impacts to water quality, non-toxic antifouling products should be used. BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms. Before construction, appropriate mitigation measure should be identified as related to harassment thresholds for construction activities and noise and areas designated as “protected” or “environmentally sensitive” should be identified for avoidance. Cables and pipelines should be insulated to reduce vibrations and electromagnetic effluent.	Potential for increased pollution during construction; contamination from seepage or rupture; impacts to EFH and EFH managed species, potential for creation of new habitat.	Potential considerations during construction phase; use BMPS to reduce water turbidity affecting fish and diving birds and noise/vibration pollution to fish or marine organisms; avoid listed species and marine mammals during construction; identify appropriate mitigation measures as they relate to harassment thresholds for construction activities and noise	Avoid areas designated as "protected" or "environmentally sensitive". Coordinate with State and federal fisheries and wildlife offices when selecting routes to avoid potentially sensitive habitats.	Coordinate with State and federal fisheries and wildlife offices to avoid impacts to organisms in close proximity to the cable/pipeline locations. Coordinate with state water quality permitting offices to ensure adequate bmps are utilized so as not to exceed water quality standards within the state. Use non-toxic anti-fouling products, if needed; use BMPs to reduce oil spill pollution. Insulate cables and pipelines to reduce vibrations and electromagnetic effluent.

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	Bottom	Conditionally Compatible	Cables and pipelines are conditionally compatible with the Water (habitat and organisms). Potential impacts from pipelines and cables include increased sediment contaminations due to discharge, seepage or rupture of pipelines; noise and vibrations; and, during construction, increased turbidity. Construction of new pipelines and cables has the potential to disturb contaminated sediment, physically alter the seabed and smother benthic habitat and organisms. Coordination with State and federal fisheries and wildlife offices will provide the opportunity to select routes that will avoid sensitive habitats and reduce impacts to organisms in close proximity to the pipelines and cables. To increase compatibility, BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms. Before construction, areas designated as “protected” or “environmentally sensitive” should be identified for avoidance. Cables and pipelines should be insulated to reduce vibrations and electromagnetic effluent. Buried cables should restore the bottom bathymetry to preconstruction depths.	Habitat created by new pipes and cables; contamination from seepage or rupture; impacts to EFH and EFH managed species	Potential considerations during construction phase; increased turbidity, potential disturbance of contaminated sediment; physical alteration of the seabed; increased noise may harm fish and marine mammals; smothering of benthic habitat and organisms from construction activities.	Avoid areas designated as "protected" or "environmentally sensitive". Coordinate with State and federal fisheries and wildlife offices when selecting routes to avoid potentially sensitive habitats.	Coordinate with State and federal fisheries and wildlife offices to avoid impacts to organisms and specific habitats types in close proximity to the cable/pipeline locations. Insulate cables and pipelines to reduce vibrations and electromagnetic effluent. If burying cables, restore bottom bathymetry to preconstruction depths.
Resources	Cultural/ Historical	Conditionally compatible	Coordination between state and federal offices is necessary to determine historical and cultural impacts of additional pipelines and cables. Stakeholders should be engaged to develop options for pipeline and cable routes that will avoid or reduce impacts to cultural and historical sites. Exclusion zones should established around sensitive resource areas. If properly sited, unburied cables may not interfere with cultural and historical resources. With adequate coordination and siting, the impacts from buried pipelines and cables may be reduced.	If properly site unburied cables may not interfere with cultural and historic resources. Pipelines and buried cables may have impacts which may be reducing with proper coordination and siting.	Potential considerations during construction phase;	Coordinate with state and federal historic offices determine historical/cultural impacts at sites, route cables and pipelines to avoid impacts to important sites and resource.	Establish exclusion zones around sensitive resource areas. Engage stakeholders in development of options to avoid or reduce impacts.
	Viewscape	Y	With proper siting and coordination between agencies, most impacts from pipelines and cables to viewscapes would be temporary. The largest impact would be during the construction and landing sites. Local stakeholders should be engaged to develop options for landing sites and routes that will avoid or reduce impacts to viewscapes. Before creating additional landing sites, utilization of existing cable and pipeline landing sites should be evaluated.	With proper siting and coordination, pipelines and cables should not impact viewscapes.	Potential considerations during construction phase; but impacts are temporary with exception of landing sites. Could be an attraction for individuals who want to view boats and equipment used during the installation process	Coordinate with local communities to identify landing locations. Evaluate potential to utilize existing cable/pipeline landing sites.	Engage local stakeholders in development of options to avoid or reduce impacts.

	OIL & LNG CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	There is a potential for co-location of renewable energy infrastructure depending on type. To avoid or minimize conflicts siting such that support vessels are able to access and maneuver around infrastructure without risk of entanglement or causing damage by impact. Therefore, coordination among energy project activities is important to maximize the site potential. | After a renewable energy project is completed, a public kiosk should be displayed to teach about the benefits of renewable energy. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; tidal/ wave energy not compatible in the same time and place; pipelines conditionally compatible	Potential considerations during construction phase	Evaluate potential for sharing infrastructure with other energy forms (Oil, LNG) Avoid establishing renewable energy areas in oil/ gas fields. Examine potential for utilizing same cable landing site as existing cable, pipelines, and other offshore energy facilities.	Construct using most current best management practices and safety protocols. Coordinate with USCG & NOAA OCS to update nautical charts.
	Pipelines and Cables	Conditionally compatible	Pipelines and cables are necessary components of oil and natural gas infrastructure. As they may have similar exclusion zones and limitations, siting pipelines and cables near oil and natural gas infrastructure would be supported as it maximizes use of space that might otherwise be limited. Compatibility of additional pipelines and cables with oil and LNG is dependent on location of the infrastructure and construction methods. To maximize compatibility, coordination between responsible agencies should occur to avoid or reduce interference with existing structures, identify potential opportunities to co-locate and examine the potential for utilizing the same onshore landing sites. Construction should use the most current best management practices and safety protocols. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; possibility to co-locate	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved pipelines and cables; avoid existing pipelines and cables unless there are opportunities to co-exist. Examine potential for utilizing same onshore landing sites site as existing cable, pipelines, and other offshore energy facilities.	Construct using most current best management practices and safety protocols. Coordinate with USCG & NOAA OCS to update nautical charts.
	Oil & LNG	Conditionally compatible	Due safety and security concerns, the siting of primary oil and natural gas infrastructure in the same location is not compatible. The co-location of supporting infrastructure may be compatible with coordination between responsible agencies and stakeholders to avoid or reduce interference with existing or approved oil or LNG projects. Construction of infrastructure should include most current BMPs and safety protocols. Associated cables and pipelines should be buried or armored per regulatory guidelines, particularly in areas	Physical occupation of space; possibility to co-locate pipeline and certain infrastructure	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved oil, or LNG projects or project sites; Coordinate to determine if there are opportunities to co-exist.	Construct using most current best management practices and safety protocols. Coordinate with USCG & NOAA OCS to update nautical charts.

	OIL & LNG CONSIDERATIONS						
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			where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.				
	Outfalls	Conditionally Compatible	The co-location of oils and natural gas infrastructure is conditionally compatible with outfalls assuming coordination between responsible agencies occurs to will avoid or reduce interference with existing or approved outfalls and oil/LNG projects. As they may have similar exclusion zones and limitations, siting outfalls near oil and natural gas infrastructure would be supported as it maximizes use of space that might otherwise be limited. Outfalls should be buried or armored per regulatory guidelines, particularly in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved outfalls, oil, or LNG project or project sites; Coordinate to determine if there are opportunities to co-exist.	Ensure pipelines are properly secured or "armored" in areas where anchoring or scouring might occur; Coordinate with USCG & NOAA OCS to update nautical charts.
Maritime	Dredging	N	Dredging and oil and natural gas are not compatible in the same area due to potential damage or undermining of infrastructure. Oil and natural gas infrastructure should evaluate siting conditions to avoid existing sand and gravel resource, extraction sites and navigation channels and other areas that frequently experience dredging. Oil and natural gas pipelines should be properly secured or armored in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource	Potential considerations during construction phase; Adherence to dredging windows	Oil and LNG infrastructure should avoid existing potential sand/gravel resource extraction sites; and navigation channels. Avoid dredging near oil and LNG sites, pipelines or associated infrastructure to avoid damage to infrastructure.	Oil and natural gas pipelines should be properly secured or armored in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Ports	Y	Oil and natural gas production generally presents no conflicts since the primary activity is located outside of port operation areas. Oil and natural gas transference is conditionally compatible with ports through coordination with responsible agencies to avoid issues with security, navigation safety, operational conflicts and contamination from spills. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential interference with navigation safety and port operation.	Potential considerations during construction phase; Scheduling LNG transport vessels in consideration with safety protocols.	Coordinate to avoid or reduce port or associated port traffic impacts to existing oil and LNG infrastructure; Coordinate with USCG to select site in order to limit navigation safety issues; Coordinate with oil/LNG entities to determine opportunities to co-locate landing sites or pipeline routing.	Preventative BMPs, including personnel training, equipment inspection and refueling procedures, should be implemented to minimize the risk of a spill; In the event of a spill, implementation measures should be outlined in operation and maintenance plan. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Coordinate with maritime and port authorities and oil and LNG entities to reduce the operational conflicts that may exist.

	OIL & LNG CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessels	N	Vessels and oil and natural gas are not compatible due to safety exclusion zones surrounding primary energy production facilities, other than those directly associated with facility safety and operations. Geological and geophysical surveys for oil and natural gas exploration have the potential to interfere with navigation safety and vessel operations. Mariners should be alerted to geological and geophysical surveys being conducted in an area to avoid interference. Oil and natural gas siting options should be evaluated to avoid those areas frequently travel by vessels, e.g. established navigation routes or other areas heavily utilized by commercial or recreational boaters.	Physical occupation of space; safety exclusion zones; only vessels directly associated with oil/LNG operations unrestricted; Geological and geophysical surveys for oil and natural gas exploration have the potential to interfere with navigation safety and vessel operations.	Interference with navigation safety during G&G surveys	Avoid siting oil and LNG sites and infrastructure in high traffic areas or navigation channels; Oil and natural gas siting options should be evaluated to avoid those areas frequently travel by vessels, e.g. established navigation routes or other areas heavily utilized by commercial or recreational boaters.	Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements
	Anchorages	N	Anchorages are not compatible with oil and natural gas production or transference due to potential interference with navigation safety and damage or undermining of infrastructure from collision or anchoring.	Physical occupation of space; interference to navigation safety;		Coordinate with USCG to avoid siting oil and LNG infrastructure in anchorages; Avoid locating anchorages near existing or proposed oil and LNG sites or infrastructure.	
	Vessel Routes/ ATON	N	Vessels routes and oil and natural gas production and transference are generally incompatible due to safety exclusion zones surrounding primary energy production facilities, potential interference with dredging from transference pipelines. Oil and natural gas siting options should be evaluated to avoid those areas frequently travel by vessels, e.g. established navigation routes or other areas heavily utilized by commercial or recreational boaters. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; safety exclusion zones;	Interference with navigation safety during G&G surveys	Coordinate with USCG and maritime stakeholders to avoid siting oil and LNG sites and infrastructure in high traffic areas or navigation channels	Clearly identify restriction zones to avoid unintentional user conflict. Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements. Coordinate with USCG & NOAA OCS to update nautical charts.
	Security	Conditionally Compatible	Oil and natural gas is conditionally compatible with security areas depending on the type and extent of restrictions placed on these areas. The ability to place oil and natural gas infrastructure within security areas may be limited as there is a potential for limited access and vessel operation due to safety restrictions. Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas to ensure placement of proper aid-to navigation.	Transfer stations need to be kept away from navigation channels, but these areas can be used to transport oil and LNG; physical occupation of space; exclusion zones; increased vessel traffic; Oil and LNG facilities require additional		Coordinate with responsible agencies to determine opportunities to co-locate infrastructure within existing security areas to reduce overall restricted areas in the region. Coordinate USCG to identify and avoid heavily used commercial and recreation areas to minimize restriction impacts on other users.	The ability to place oil and natural gas infrastructure within security areas may be limited as there is a potential for limited access and vessel operation due to safety restrictions. Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas to ensure placement of proper aid-to navigation. Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements

	OIL & LNG CONSIDERATIONS						
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				security and or restrictions zones. With planning, associated infrastructure could co-locate within other secure areas.			
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally compatible	The use of fishing gear (pelagic) and oil and natural gas is conditionally compatible. Pelagic fishing gear would not conflict with the primary intention of oil and natural gas, but improperly deployed or derelict fishing gear has the potential to create obstacles or entanglement hazards that impede navigation safety to vessels directly associated with oil and natural gas production or transfer. Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; interference with navigation safety; gear entanglement; exclusion zones; creation of new habitat type (platforms/pipes)	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment; temporary displacement of target fish species due to survey activities;	Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized.	Avoid conducting surveys during migration and spawning seasons; Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements. Evaluate placement of associated pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear; Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Fishing Gear (Bottom)	Conditionally compatible	The use of fishing gear (bottom) and oil and natural gas is conditionally compatible depending on the type of gear utilized within an area. Bottom fishing gear would not conflict with the primary intention of oil and natural gas, but has the potential to cause direct damage to supporting infrastructure if that infrastructure were not properly protected. Improperly deployed or derelict fishing gear has the potential to create obstacles or entanglement hazards that impede navigation safety to vessels directly associated with oil and natural gas production or transfer. Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; interference with navigation safety; gear entanglement; exclusion zones; creation of new habitat type (platforms/pipes); buried pipelines and bottom fishing should be compatible.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment; temporary displacement of target fish species due to survey activities;	Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized.	Avoid conducting surveys during migration and spawning seasons; Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements. Evaluate placement of associated pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

	OIL & LNG CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	Conditionally compatible	Aquaculture and oil and natural gas are conditionally compatible dependent upon the location of both types of infrastructure. Security restrictions around platforms may preclude aquaculture activities from occurring in immediate vicinity. Additionally, the risk of oil or natural gas leaks and its potential impact on aquaculture production may be too great. | To maximize compatibility, coordination between resource agencies should ensure that aquaculture equipment is compatible for use near pipelines and platforms to reduce potential damage to oil and natural gas infrastructure. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of the same space, both activities have exclusion zone limitations; opportunities to co-locate with offshore uses.	Coordination is necessary during construction phase;	Coordinate with stakeholders to minimize disturbance of each operation type for siting, construction, and maintenance. Placement of aquaculture sites in close proximity oil/LNG risk impacts if emergency/unscheduled maintenance is required. Evaluate potential risk of contamination to aquaculture facility if pipeline damaged.	Consider long term planning options including the use of platforms for aquaculture operations at the end of their "useful" life, instead of abandonment. Aquaculture facility equipment and gear type must be compatible for use near pipelines and platforms to reduce potential damage to infrastructure. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation; Consider long term planning options including the use of platforms for aquaculture operations at the end of their "useful" life, instead of abandonment. Aquaculture facility equipment and gear type must be compatible for use near pipelines and platforms to reduce potential damage to infrastructure.
	Swimming/ Diving	N	Swimming and diving is not compatible with oil and natural to security concerns and risks to human safety, with exception to commercial diving activities associated with the maintenance and operation of the facility. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving when siting supporting infrastructure such as pipelines and cables. Coordination between stakeholder groups and resource agencies is necessary to minimize disturbance and address any potential public concerns. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Not compatible in exclusion zones; Minor risks associated with swimming/diving near pipeline infrastructure; swimming and diving should be avoided around platform and landing sites.	Potential considerations during construction phase; long term impacts greatest during swimming/diving seasons. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving when siting supporting infrastructure such as pipelines and cables.	Review recreational use data to identify those areas most for swimming and diving. Create exclusion zones for safety. Increase swimmer/diver safety by providing signage detailing risks associated with activities around pipelines and platforms. Clearly post signs in areas where swimming and diving is prohibited. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Surface Water Sports	Conditionally compatible	The compatibility of surface water sports and oil and natural gas infrastructure is dependent on several conditions including vessel size, location of oil and natural gas area and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for surface water sports. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated	Not compatible in exclusion zones; Minor risks associated with surface water sports near pipeline infrastructure; surface water sports should be avoided around platform and landing sites.	Potential considerations during construction phase; long term impacts greatest during peak recreational season. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas heavily utilized by boating. Create exclusion zones for safety. Increase surface water sports safety by providing signage detailing risks associated with activities around pipelines and platforms. Clearly post signs in areas where surface water sports are prohibited. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper ATONs. Nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must complete and obtain a certificate of boating safety education to operate boats in Delaware waters.

	OIL & LNG CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware waters.				
	Boating	Conditionally compatible	The compatibility of boating activities and oil and natural gas infrastructure is dependent on several conditions including vessel size and maneuverability, location of oil and natural gas area and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for boating. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Not compatible in exclusion zones; Minor risks associated with boating near pipeline infrastructure; swimming and diving should be avoided around platform and landing sites; location of oil and natural gas area; vessel size and maneuverability.	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Recreational use data should be evaluated to identify and avoid areas heavily used for boating to avoid popular recreation/tourism sites.	Create exclusion zones for safety. Where possible, bury pipelines where anchoring or scouring might occur. Educate boaters on safety practices when operating around platforms and pipeline areas or landing sites. Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements; Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Hunting	Conditionally compatible	The compatibility of hunting and oil and natural gas infrastructure is dependent on several conditions including vessel size, location of oil and natural gas area and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used by hunters. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot to avoid damaging oil and natural gas infrastructure. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Not compatible in exclusion zones; Minor risks associated with swimming/diving near pipeline infrastructure; hunting should be avoided around platform and landing sites; location of oil and natural gas area; size of vessels within an area	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during hunting seasons. Evaluate sites to avoid designated hunting sites.	Review recreational use data to identify those areas most heavily used by hunters. Create exclusion zone for firearm use. Where possible, bury pipelines where anchoring or scouring might occur. Educate hunters on safety practices when operating around platform and pipeline areas or landing sites. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot to avoid damaging oil and natural gas infrastructure. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

	OIL & LNG CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Habitat & Organisms	Air	Conditionally Compatible	Potential conflicts exist between air (habitat and organisms) and oil and natural gas due to the risk of increased air emissions during construction and operation of oil and natural gas facilities. To maximize compatibility between oil and natural gas and air (habitat and organisms) several factors should be considered. Oil and natural gas infrastructure should not be established in conservation and protection areas. Existing data should be evaluated to identify migration, breeding or other heavily utilized areas to avoid or minimize impacts. Resource management offices should coordinate with permitting agencies to identify and implement best management practices to reduce negative impacts to species and include lighting on oil and natural gas infrastructure to minimize attraction, while meeting aviation standards. Construction of oil and natural gas infrastructure may include the following: time of year restrictions for migration and breeding; noise level monitoring; operating associated maintenance and construction vessels in a manner to ensure efficient fuel use and minimize air quality impacts; and adherence to specific construction methods to minimize environmental impacts. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Potential for increased air emissions during, surveys (boat and aircraft) construction and operation of oil/LNG facilities.	Potential considerations during construction phase; air pollution impacts from vessels during construction; avoid listed species and marine mammals during construction; identify appropriate mitigation measures as they relate to harassment thresholds for construction activities and noise		Coordinate with DNREC Division of Air Quality and EPA Region III to identify and implement BMPs to avoid or minimize air pollutants during operation and construction. Develop and implement lighting plan to reduce impact on avian species. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Water	Conditionally Compatible	Oil & natural gas and water (habitat and organisms) are conditionally compatible. Oil and natural gas structures may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality. Due to the potential for leaks and spills, best management practices for operation and safety should be employed to reduce impacts to water quality. Noise and vibrations generated may negatively impact aquatic species. Critical or sensitive resource areas should be avoided when siting oil and natural gas infrastructure.	Potential for increased water pollution during, surveys, construction and operation of oil/LNG facilities; Possible ship strikes during docking, transportation; impacts to aquatic organisms;	Potential considerations during construction phase; use BMPS to reduce water turbidity affecting fish and diving birds and noise/vibration pollution to fish or marine organisms; avoid listed species and marine mammals during construction; identify appropriate mitigation measures as they relate to harassment thresholds for construction activities and noise	Avoid areas designated as "protected" or "environmentally sensitive". Coordinate with State and federal fisheries and wildlife offices when selecting routes to avoid potentially sensitive habitats.	Coordinate with DNREC Division of Water Resources and EPA Region III to identify and implement BMPs to avoid or minimize water pollutants during operation and construction. Preventative BMPs, including personnel training, equipment inspection and refueling procedures, should be implemented to minimize the risk of a spill; In the event of a spill, implementation measures should be outlined in an Emergency Action Plan; Plan to contain marine debris, reduce long term impacts from surfactants and contamination must be outlined in operations and maintenance plan.

	OIL & LNG CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Bottom	Conditionally Compatible	Oil & natural gas and bottom (habitat and organisms) are conditionally compatible. Potential impacts from oil & natural gas infrastructure includes increased sediment contaminations due to discharge, seepage or rupture of pipelines; noise and vibrations during construction and increased turbidity. Construction of pipelines associated with oil & natural gas has the potential to disturb contaminated sediment, physically alter the seabed and smother benthic habitat and organisms. Coordination with state and federal fisheries and wildlife offices will provide the opportunity to avoid sensitive habitats and reduce impacts to organisms when siting oil and natural gas infrastructure. To increase compatibility, BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms.	Physical occupation of space; marine invertebrate population impacts from seismic surveys; Potential for developmental impacts of shellfish larvae. Permanent impacts at platform and pipeline sites. Potential for contamination of bottom habitat due to seepage/rupture; impacts to EFH and EFH managed species Potential for new habitat created by permanent infrastructure.	Potential considerations during construction phase; increased turbidity, potential disturbance of contaminated sediment; physical alteration of the seabed; increased noise may harm fish and marine mammals; smothering of benthic habitat and organisms from construction activities. Localized sediment resuspension and redisposition;	Avoid areas designated as "protected" or "environmentally sensitive". Coordinate with State and federal fisheries and wildlife offices when selecting routes to avoid potentially sensitive habitats.	Coordinate with State and federal fisheries and wildlife offices to avoid impacts to organisms and specific habitats types in close proximity to the cable/pipeline locations. Insulate platforms and pipelines to reduce vibrations and potential pollutant impacts. BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms.
Resources	Cultural/Historical	Conditionally Compatible	Oil & natural gas infrastructure is conditionally compatible with cultural & historical resources depending upon the proposed location. Coordination between state and federal historic offices and local and regional tribes should take place during the planning process to avoid impacting important sites.	If properly sited unburied pipelines may not interfere with cultural and historic resources. Transfer pipelines may have impacts which may be reducing with proper coordination and siting.	Potential considerations during construction phase;	Coordinate with state and federal historic offices determine historical/cultural impacts at sites, route pipelines and site platforms to avoid impacts to important sites and resource.	Include state historical groups and local tribes in the planning process. Establish exclusion zones around sensitive resource areas. Engage stakeholders in development of options to avoid or reduce impacts.
	Viewscape	Conditionally Compatible	Viewscapes are conditionally compatible with oil and natural gas depending upon the proposed location and visible distance from shore. To minimize conflicts, coordination with potential communities or stakeholders impacted by project should begin during the initial phase of the project.	Structures in state waters would be too close to not impact viewscape.		Coordination with potential communities or stakeholders impacted by project should begin during the initial phase of the project.	

	OUTFALLS CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Y	While they cannot physically occupy the same space, the placement of renewable energy infrastructure near or adjacent to outfalls would be possible with the proper coordination. Coordination with the US Coast Guard should be conducted to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	While they cannot Physical occupy of same space, coordination would allow use of adjacent spaces.	Potential considerations during construction phase	Avoid current and proposed outfall locations; Coordinate to avoid impacts to existing or proposed wave/current turbines; ensure placement of infrastructure does not interfere with dispersal of effluent from outfall	Coordination with the US Coast Guard should be conducted to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Pipelines and Cables	Conditionally Compatible	The placement of pipelines and cables near outfall pipes is conditionally compatible. As they may have similar exclusion zones and limitations, siting pipelines and cables near outfalls would be supported as it maximizes use of space that would otherwise have limited use. To ensure compatibility, coordination between responsible agencies should consider the following: avoid or reduce interference with existing pipelines and cables including additional spacing requirement necessary to maintain infrastructure and examine the potential for utilizing the same onshore landing sites. Construction should use the most current best management practices and safety protocols. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; opportunities to co-locate	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved outfalls; avoid existing outfalls unless there are opportunities to co-exist.	Cables must be "armored" and buried in areas where anchoring or scouring might occur, Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Oil & LNG	Conditionally Compatible	The co-location of oils and natural gas infrastructure is conditionally compatible with outfalls assuming coordination between responsible agencies occurs to will avoid or reduce interference with existing or approved outfalls and oil/LNG projects. As they may have similar exclusion zones and limitations, siting outfalls near oil and natural gas infrastructure would be supported as it maximizes use of space that might otherwise be limited. Outfalls should be buried or armored per regulatory guidelines, particularly in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space	Potential considerations during construction phase	Coordinate to avoid or reduce interference with existing or approved outfalls, oil, or LNG project or project sites; Coordinate to determine if there are opportunities to co-exist.	Outfalls should be buried or armored per regulatory guidelines, particularly in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Outfalls	Conditionally Compatible	Coordination between responsible agencies should occur to determine opportunities to co-locate outfall infrastructure. Sensitive habitats and impacts to marine organisms in close proximity to the outfall should be avoided. Non-toxic antifouling products should be used and BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms. Discharge should be monitored to ensure water quality standards are maintained.	Physical occupation of space; co-location in close proximity if overall discharge is taken into consideration to not exceed state water quality standards.	Potential considerations during construction phase	Coordination between responsible agencies should occur to determine opportunities to co-locate outfall infrastructure.	Sensitive habitats and impacts to marine organisms in close proximity to the outfall should be avoided. Non-toxic antifouling products should be used and BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms. Discharge should be monitored to ensure water quality standards are maintained.

	OUTFALLS CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Maritime	Dredging	N	Dredging and outfalls are conditionally compatible. Depending on the type of outfall, dredging may be required for the placement of outfall infrastructure during construction. Coordination between responsible agencies should occur to avoid potential damage to or undermining of the outfall infrastructure and interference with dredging operations. To maximize compatibility, outfalls should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource	Potential considerations during construction phase; Adherence to dredging windows	Avoid dredging near an outfall location; analyze available data and coordinate with appropriate agency to avoid siting outfall in sand/gravel resource area. If required, bury outfall pipe to sufficient depth not to interfere with dredging operations and extends outfall beyond maintenance dredging area.	Coordinate with USCG & NOAA OCS to update nautical charts.
	Ports	Conditionally Compatible	Ports and outfalls are conditionally compatible. Coordination between responsible agencies is necessary to avoid areas that would compromise navigation safety and dredging issues. To maximize compatibility, outfalls should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential interference with navigation safety and port operation.	Potential considerations during construction phase	Coordinate with port authorities to avoid siting in areas that would compromise navigation safety.	Analyze data to ensure sediment accretion does not impact proposed area for outfall, or the outfall pipe is sufficiently buried and extends beyond maintenance dredging areas. Coordinate with USCG & NOAA OCS to update nautical charts.
	Vessels	Conditionally Compatible	Vessels and outfalls are conditionally compatible depending on the location and type of outfall. Coordination between responsible agencies and stakeholder groups is necessary to avoid siting outfalls in heavily used areas that would compromise navigation safety. If a proposed outfall can be buried, construction must follow necessary depths required by permitting agencies. Anchoring restrictions should be implemented in located where outfalls may be physically damaged. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; compatible with coordination to avoid interference with navigation safety and dredging issues	Potential considerations during construction phase	Coordinate with USCG and maritime stakeholders to avoid siting in high traffic areas to avoid interference with navigation safety or navigation channels due to maintenance dredging issues.	Sufficiently bury pipe and extend outfall beyond maintenance dredging/navigation channel areas. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Anchorages	N	Anchorages and outfalls are incompatible due to conflicts with navigation safety and potential damage or undermining of outfall infrastructure. Outfalls should avoid siting in areas of existing or proposed anchorage sites.	Physical occupation of space; co-location in close proximity if overall discharge is taken into consideration to not exceed state water quality standards.	Potential considerations during construction phase	Outfalls should avoid siting in areas of existing or proposed anchorage sites.	Ensure cumulative discharge does not exceed state water quality standards. Coordinate with USCG & NOAA OCS to update nautical charts.

	OUTFALLS CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessel Routes/ATON	Conditionally Compatible	The siting of outfalls in or near vessel routes is conditionally compatible. Potential interference with maintenance dredging activities and physical damage to the pipes for vessel or anchor impacts. To maximize compatibility, coordination between responsible agencies, stakeholder groups and permitting agencies to avoid siting outfalls in high vessel traffic areas (navigation routes/channels) unless they can be buried to the necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; compatible with coordination to avoid interference with navigation safety and dredging issues	Potential considerations during construction phase	Coordinate with USCG and maritime stakeholders to avoid siting in high traffic areas to avoid interference with navigation safety or navigation channels due to maintenance dredging issues.	Sufficiently bury pipe and extend outfall beyond maintenance dredging/navigation channel areas. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Security	Conditionally Compatible	The placement of outfalls within security areas is conditionally compatible with coordination with agencies responsible for security area restrictions. Outfalls and security zones may have similar exclusion zones and limitations that could provide an opportunity for outfalls to maximize space with limited use. Areas with unexploded ordinances or sensitive resources should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; Outfalls can be co-located with coordination; avoid siting in areas of unexploded ordnances; Outfalls should not be located near navigation channels	Potential considerations during construction phase	Coordinate siting with agency responsible for areas restrictions to avoid siting in identified danger zones, restricted areas and unexploded ordnance areas.	Outfalls and security zones may have similar exclusion zones and limitations that could provide an opportunity for outfalls to maximize space with limited use. Areas with unexploded ordinances or sensitive resources should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	The use of pelagic fishing gear near outfalls is conditionally compatible. Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location. Potential conflicts include creation of exclusion zones and displacement of fishing activities during construction and maintenance. To avoid damage or undermining of the outfall infrastructure, fishing vessels should be prohibited from anchoring near outfalls unless it has been buried to necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; gear entanglement, interference with navigation safety, anchoring near an ocean outfall could damage or undermine the infrastructure.	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location.	Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to outfall infrastructure. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Anchoring in areas with unburied pipeline is prohibited. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards.

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	Fishing Gear (Bottom)	Conditionally Compatible	The use of bottom fishing gear near outfalls is conditionally compatible. Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location. Potential conflicts include creation of exclusion zones and displacement of fishing activities during construction and maintenance. To avoid damage or undermining of the outfall infrastructure, fishing vessels should be prohibited from anchoring or launching bottom fishing gear near outfalls. If a proposed outfall can be buried, construction must follow necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; gear entanglement, interference with navigation safety, anchoring near an ocean outfall could damage or undermine the infrastructure; displacement of fish species	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location.	Trawling, bottom fishing and anchoring is not allowed in area with unburied outfall pipes or point of discharge to prevent damage to infrastructure and gear entanglement. ; Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to infrastructure and gear. To avoid damage or undermining of the outfall infrastructure, fishing vessels should be prohibited from anchoring or launching bottom fishing gear near outfalls. If a proposed outfall can be buried, construction must follow necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Anchoring in areas with unburied pipeline is prohibited. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards.
	Aquaculture	N	Outfalls and aquaculture facilities are not compatible in the same location due to exclusion zones and limitations of these activities. Outfalls can potentially impact water quality that is not conducive for aquaculture production if these sites are located within close proximity of one another. Coordination between responsible agencies is necessary to avoid siting aquaculture and outfalls in the same location.	Potential for water quality degradation possible negatively affecting production. exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, Pharmaceuticals and Personal Care Products (PPCPs)		Due to potential for exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, pharmaceuticals, aquaculture facilities should not be sited in outfall discharge areas; Coordination between responsible agencies is necessary to avoid siting aquaculture and outfalls in the same location.	Assess the effects of discharge storm water or waste water on the marine environment; evaluate potential for standard and innovative BMPs to manage environmental impacts to marine waters. Coordinate with USCG & NOAA OCS to update nautical charts. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards.
	Swimming/ Diving	N	Swimming and diving is conditionally compatible with outfalls and is dependent on the location of outfall infrastructure. Swimmers and divers should avoid discharge areas near outfall infrastructure. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving. Coordination between stakeholder groups and resource agencies is necessary to minimize disturbance and address any potential public concerns. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Not compatible in exclusion zones; Minor risks associated with swimming/diving near pipeline infrastructure; swimming and diving should be avoided around platform and landing sites.	Potential considerations during construction phase; temporary disruption of beach/swimming access in cases of exceeding water quality standards; potential temporary impacts from seepage or rupture.	Due to potential for exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, & pharmaceuticals, outfall water discharge should be located a safe distance offshore away from swimming beaches. Evaluate potential sites, identifying those more heavily utilized for swimming & diving and consider avoid or reducing impacts to those areas. Coordinate with stakeholder groups	Review recreational use data to identify those areas most for swimming and diving. Create exclusion zones for safety. Increase swimmer/diver safety by providing signage detailing risks associated with activities around pipelines and platforms. Clearly post signs in areas where swimming and diving is prohibited. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

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						to reduce impacts during peak recreational seasons. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving when siting supporting infrastructure such as pipelines & cables.	
	Surface Water Sports	Conditionally Compatible	Surface water sports and outfalls are conditionally compatible. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for surface water sports. Signs should be clearly posted in prohibited areas with information detailing risks associated with surface water sports activities near outfalls. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Establish exclusion zones for surface water sports near point of discharge due to potential health/exposure issues.	Potential considerations during construction phase; temporary disruption of surface water sports in cases of exceeding water quality standards; potential temporary impacts from seepage or rupture.	Evaluate potential sites, identifying those more heavily utilized for surface water sports and consider avoid or reducing impacts to those areas due to potential for exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, and pharmaceuticals.	Sanitation/storm water control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regular monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards; Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

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	Boating	Conditionally Compatible	The compatibility of boating activities and oil and outfalls is dependent on several conditions including vessel draft and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for boating. To avoid damage or undermining of the outfall infrastructure, boats should be prohibited from anchoring near outfalls. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; anchoring near an ocean outfall could damage or undermine the infrastructure; vessel draft; exclusion zones	Potential considerations during construction phase; temporary disruption of boating in cases of seepage or rupture.	Evaluate potential sites, identifying those more heavily utilized for boating and considers avoiding or reducing damage or undermining of infrastructure due to anchoring; Recreational use data should be evaluated to identify and avoid areas heavily used for boating.	Sanitation/storm water control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards; boats should be prohibited from anchoring near outfalls; Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. .
	Hunting	Conditionally Compatible	Hunting and outfalls are conditionally compatible. Recreational use data should be evaluated to identify and avoid areas heavily used by hunters. To avoid damage or undermining of the outfall infrastructure, boats should be prohibited from anchoring near outfalls. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Coordination between stakeholder groups and responsible agencies should be completed to reduce or avoid impacts during designated hunting seasons. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; anchoring near an ocean outfall could damage or undermine the infrastructure.	Potential considerations during construction phase; temporary disruption of hunting in cases of seepage or rupture.	Evaluate potential sites, identifying those more heavily utilized for hunting and consider avoiding or reducing damage or undermining of infrastructure due to anchoring.	Sanitation/storm water control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Coordination between stakeholder groups and responsible agencies should be completed to reduce or avoid impacts during designated hunting seasons. Coordination with the US Coast Guard is necessary to

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							establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
Habitat & Organisms	Air	Y	Outfalls and air (habitat and organisms) are compatible these activities do not occupy the same space. Coordination with permitting agencies for an outfall project is necessary to identify and implement BMPs to avoid or minimize air pollutants during construction.		Emissions of constructions vehicles and equipment		Coordinate with DNREC DAQ and EPA to identify and utilize appropriate BMPs to reduce or prevent air quality impacts.
	Water	Conditionally Compatible	Outfalls are conditionally compatible with the Water (habitat and organisms). Activities could result in increased water pollution due to discharge, seepage or rupture of pipelines; noise and vibrations; and during construction, increased turbidity. Coordination with state and federal fisheries and wildlife offices is necessary to avoid sensitive habitats and reduce impacts to organisms in close proximity to outfalls. Water quality permitting offices need to be included in the planning process to ensure adequate BMPs are utilized and water quality standards within the state are not exceeded. BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms.	Potential water quality degradation affecting human and non-human use.	Increased local turbidity during construction; outfall construction impacts to EFH (directly and indirectly disruption of food resources); physical injuries to fish species during construction; impacts to local economy due poor water quality/beach closures during peak tourist season.	Due to potential water quality degradation, avoid areas of high recreational use or exceptional habitat quality for commercially or recreationally important species, or non-game species of concern. Avoid areas of water intake.	Sanitation agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters using multiport diffusers, in comparison to single-port diffusers, appears to aid in the dispersal of effluent over a wider area to decrease the risk of water quality degradation; complete construction of outfalls during the winter months to minimize impacts to marine mammals; construction equipment should be selected to minimize sound intensity and duration to prevent affecting the acoustic ability or injuring the hearing organs of marine mammals; avoid seal habitats by utilizing HDD; avoid impacts to sea turtles by using clamshell or cutter suction dredger equipment and construction during the winter months; swimming in the direct vicinity of the ocean outfall may be prohibited as a precaution, implement long-term ecological monitoring including microbial pathogen and chemical effects.

	OUTFALLS CONSIDERATIONS						
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Bottom	Conditionally Compatible	Outfalls are conditionally compatible with the Bottom (habitat and organisms). Potential impacts from outfalls include increased sediment contaminations due to discharge, seepage or rupture of pipelines; noise and vibrations; and, during construction, increased turbidity. Construction of new outfalls has the potential to disturb contaminated sediment, physically alter the seabed and smother benthic habitat and organisms. Coordination with state and federal fisheries and wildlife offices is necessary to avoid sensitive habitats and reduce impacts to organisms in close proximity to the pipelines and cables. To increase compatibility, BMPs should reduce noise vibrations and water turbidity affecting fish, diving birds or other marine organisms.	Potential water quality degradation resulting in a declined species richness and diversity of macro invertebrate communities, particularly EFH.	Disturbance to benthic communities during construction/dredging of outfalls.	Coordinate with fisheries agencies to identify areas of particular significance to benthic species and avoid or minimize impacts to those areas.	Assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential Monitor benthic biota before and after construction to determine effects on benthic community's environmental impacts to marine waters; utilize BMPs to avoid unnecessary construction impacts. Reestablish bottom topography after installation of pipe.
Resources	Cultural/ Historical	Conditionally Compatible	Outfalls are conditionally compatible with culture and historical sites. Coordination between state and federal historic offices is necessary to determine historical and cultural impacts of outfalls. Before construction, exclusion zones should be created around sensitive resource areas to avoid or minimize impacts of outfalls.	If properly sited unburied pipes may not interfere with cultural and historic resources. Buried pipe may have impacts which may be reducing with proper coordination and siting.	Potential considerations during construction phase;	Coordinate with state and federal historic offices determine historical/cultural impacts at sites, route pipes to avoid impacts to important sites and resource.	Include state historical groups and local tribes in the planning process. Establish exclusion zones around sensitive resource areas. Engage stakeholders in development of options to avoid or reduce impacts.
	Viewscape	Conditionally Compatible	With proper siting and coordination between agencies, most impacts from outfalls to viewscapes would be temporary. The largest impact would be during construction of the outfall. Local stakeholders should be engaged to develop options to avoid or reduce impacts to viewscapes.	With proper siting and coordination, buried outfall pipes should not impact viewscapes.	Potential considerations during construction phase;	Coordinate with community stakeholders to identify and avoid areas of higher use or more scenic value.	Engage local stakeholders in development of options to avoid or reduce impacts.

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	N	Renewable energy infrastructure and dredging are not compatible activities. When siting renewable energy infrastructure, potential sand/gravel resource extraction sites and areas requiring dredging, such as navigation channels, should be avoided as dredging may undermine or damage the infrastructure and the infrastructure may limit access to limited sand and gravel resources. To maximize compatibility, transmission cables associated with renewable energy should avoid shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. The top of the cable crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource;	Potential considerations during construction phase; Adherence to dredging windows	Renewable energy infrastructure should avoid existing potential sand/gravel resource extraction sites; and navigation channels.	The top of the cable crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Establish dredging exclusion zone around renewable energy infrastructure, when placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Pipelines and Cables	Conditionally Compatible	Dredging is required for the construction and placement of some cable and pipelines infrastructure. However, coordination should occur to avoid improper placement of pipelines and cables which can interfere with maintenance dredging operations and may result in damage or undermining of pipeline and cable infrastructure. To maximize compatibility, pipelines and cable routes should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement	Physical occupation of space; siting would prohibit use of area as sand/gravel resource	Potential considerations during construction phase; Adherence to dredging windows	Pipelines and cables routes selected to consider avoiding shipping channels and navigation routes; Cables must be buried to prevent interference with dredging activities.	The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			of proper aids-to-navigation.				
	Oil & LNG	N	Dredging and oil and natural gas are not compatible in the same area due to potential damage or undermining of infrastructure. Oil and natural gas infrastructure should evaluate siting conditions to avoid existing sand and gravel resource, extraction sites and navigation channels and other areas that frequently experience dredging. Oil and natural gas pipelines should be properly secured or armored in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource	Potential considerations during construction phase; Adherence to dredging windows	Oil and LNG infrastructure should avoid existing potential sand/gravel resource extraction sites; and navigation channels. Avoid dredging near oil and LNG sites, pipelines or associated infrastructure to avoid damage to infrastructure.	Oil and natural gas pipelines should be properly secured or armored in areas where anchoring or scouring may occur. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Outfalls	N	Dredging and outfalls are conditionally compatible. Depending on the type of outfall, dredging may be required for the placement of outfall infrastructure during construction. Coordination between responsible agencies should occur to avoid potential damage to or undermining of the outfall infrastructure and interference with dredging operations. To maximize compatibility, outfalls should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource	Potential considerations during construction phase; Adherence to dredging windows	Avoid dredging near an outfall location; analyze available data and coordinate with appropriate agency to avoid siting outfall in sand/gravel resource area. If required, bury outfall pipe to sufficient depth not to interfere with dredging operations and extends outfall beyond maintenance dredging area.	Coordinate with USCG & NOAA OCS to update nautical charts.
Maritime	Dredging	N	Dredging operations cannot occur in the same time and place as other dredging operation. It is unlikely that this would occur as permitting requirements would prevent simultaneous operations in the same location.				
	Ports	Y	Dredging is required for the maintenance of ports. Coordination should occur between ports operators and users to reduce conflicts that could impact navigation safety, port operations, and dredge operations.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource, siting of ATONS would	Adherence to dredging windows; temporary impacts to port operations during dredging.	Evaluate sediment transport at potential port sites. Sites with lower sediment accretion rates requiring less maintenance dredging are preferable. Evaluate potential constructing docks and piers in navigable depths. Coordinate with fisheries agencies to identify and avoid sensitive resource areas, particularly important benthic communities.	Evaluate potential confined disposal or beneficial reuse sites when selecting port sites. Dredging depths cannot exceed existing controlling depth of the connecting or controlling waterway. Adhere to established dredging windows. When placing sediments for beneficial reuse coordinate with resource agencies to minimize the affect on periods of peak production for habitat use (spawning, nesting etc)

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessels	Y	Dredging is necessary to maintain navigable conditions in certain waterways. Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified waterways in order to avoid impacts to navigation safety. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; vessels and dredging equipment could not operate at same time and place	Adherence to dredging windows; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety	Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified waterways in order to avoid impacts to navigation safety.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc); Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Anchorages	Conditionally Compatible	Dredging within anchorages is conditionally compatible. Coordination must occur to prevent interference with anchorage operations and navigation safety. Anchorage siting options should be evaluated to avoid sand resource and gravel extraction areas as continual disturbance from anchoring may negatively impact this resource.	Physical occupation of space; Vessels at anchor could interference with dredging operation.	Adherence to dredging windows; temporary impacts to anchorage availability during dredging.	Coordination must occur to prevent interference with anchorage operations and navigation safety. Anchorage siting options should be evaluated to avoid sand resource and gravel extraction areas as continual disturbance from anchoring may negatively impact this resource.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted.
	Vessel Routes/ATON	Conditionally Compatible	Dredging is necessary to maintain navigable conditions in certain waterways. Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified navigation channels in order to avoid impacts to navigation safety. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Navigation channel siting options should be evaluated to avoid sand resource and gravel extraction areas and, if possible should located in areas where necessary depths may be naturally maintained to reduce the need for dredging.	Physical occupation of space; Dredging would have to be routed around ATONs prohibit use of area as sand/gravel resource	Adherence to dredging windows; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety	Coordinate with USCG to minimize or avoid impact to vessel traffic and current or proposed ATONs.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc). Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Navigation channel siting options should be evaluated to avoid sand resource and gravel extraction areas and, if possible should located in areas where necessary depths may be naturally maintained to reduce the need for dredging.
	Security	Conditionally Compatible	Dredging within security areas is conditionally compatible and is dependent upon the restrictions placed on the area. Dredging should be avoided in those areas known to contain unexploded ordinances. Dredging within security areas must be conducted with authorization and coordination with the entities responsible for establishing the restrictions.	Physical occupation of space; Dredging should be prohibited in exploded ordnance areas.	Adherence to dredging windows; temporary impacts to operations in restricted areas during dredging.	Dredging should be avoided in those areas known to contain unexploded ordinances.	Special equipment may be needed depending on accessibility to restricted sites, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc). Dredging within some security zones is compatible with authorization

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	Dredging and pelagic fishing activities are conditionally compatible. Dredging may negatively impact essential fish habitat due to sediment resuspension and settlement or direct disturbance, interfere with the reproductive success of important commercial and recreational species through the disruption of spawning and migratory areas, affect to the suitability of commercial and recreational fishing ground habitats. Coordination with resource and permitting agencies should occur to prevent or reduce impacts to areas sensitive to fisheries. Conducting fishing operations near or adjacent to dredging operations may cause navigation safety issues and gear entanglement, damage, or loss; therefore a minimum safety buffer should be adhered.	Physical occupation of space; Fishing activities should be prohibited during active dredging operations	Adherence to dredging windows to avoid impacts to spawning, feeding and migratory areas; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety, minimize dredging activities during periods of high recreational or commercial activities.	Evaluate data to avoid sensitive benthic habitat (e.g. important breeding, feeding, migratory areas). Select borrow sites that have been previously used for sand and gravel mining to minimize reoccurring fishery impacts related to direct disturbance; utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts;	Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted, coordinate with stakeholders to reduce impacts to the fishery industry, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Fishing Gear (Bottom)	Conditionally Compatible	Dredging and bottom fishing activities are conditionally compatible. Dredging may negatively impact essential fish habitat due to sediment resuspension and settlement or direct disturbance, interfere with the reproductive success of important commercial and recreational species through the disruption of spawning and migratory areas, affect to the suitability of commercial and recreational fishing ground habitats. Coordination with resource and permitting agencies should occur to prevent or reduce impacts to areas sensitive to fisheries. Conducting fishing operations near or adjacent to dredging operations may cause navigation safety issues and gear entanglement, damage, or loss; therefore a minimum safety buffer should be adhered.	Physical occupation of space; Fishing activities should be prohibited during active dredging operations; interfere with the reproductive success of important commercial and recreational species through the disruption of spawning and migratory areas, affect to the suitability of commercial and recreational fishing ground habitats.	Adherence to dredging windows to avoid impacts to spawning, feeding and migratory areas; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety, minimize dredging activities during periods of high recreational or commercial activities.	Coordination with resource and permitting agencies should occur to prevent or reduce impacts to areas sensitive to fisheries. Evaluate data to avoid sensitive benthic habitat (e.g. important breeding, feeding, and migratory areas). Select borrow sites that have been previously used for sand and gravel mining to minimize reoccurring fishery impacts related to direct disturbance; utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts;	Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted, coordinate with stakeholders to reduce impacts to the fishery industry, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Aquaculture	N	Dredging and aquaculture are not compatible as the placement or operation of necessary equipment for one activity will interfere with the placement or operation of necessary equipment for other.	Physical occupations of space (Dredging and aquaculture cannot occur at the same time and place)	If aquaculture operations were to temporarily halt, depending on the infrastructure, dredging may be feasible	Siting of aquaculture facilities should avoid areas of sand and gravel resources.	
	Swimming /Diving	N	Swimming and diving is not compatible with dredging operations due to potential safety issues. If dredging must be conducted in a location where swimming and diving occurs, restrictions including a minimum buffer zone must be implemented to prevent swimmers or divers from entering the area until dredging is complete.	Physical occupation of space; Swimming and diving activities should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by divers avoid disrupting resources within these sites	Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized recreational areas during peak recreational seasons, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Surface Water Sports	Conditionally Compatible	Surface water sports are not compatible with active dredging operations due to potential safety issues. If dredging must be conducted in a location where surface water sports occur, restrictions including a minimum buffer zone must be implemented to prevent recreational users from entering the area until dredging is complete. Dredging has the potential to affect wave action as a result of altering the bottom topography. Coordination with stakeholders should be conducted when dredging is proposed in those areas that area heavily utilized by those engaging in surface water sports to avoid or reduce dredging operations from occurring during peak recreational periods and from altering the environment such that surface water sport activities would be precluded in the future. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; surface water sports should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by surface water sports avoid disrupting natural processes within these sites (i.e. wave action)	Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized recreational areas during peak recreational seasons, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc). All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Conditionally Compatible	Dredging is necessary to maintain navigable conditions in certain waterways. Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified waterways in order to avoid impacts to navigation safety. If dredging must be conducted in a location where boating occurs, restrictions including a minimum buffer zone must be implemented to prevent boaters from entering the area until dredging is complete. Coordination with stakeholders should occur to avoid or reduce dredging operations from occurring during peak recreational periods. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; boating should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by boating avoid disrupting natural processes within these sites (i.e. wave action)	Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized recreational areas during peak recreational seasons, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, issue local notice to mariners identifying areas in which dredging will be conducted
	Hunting	Conditionally Compatible	Dredging is necessary to maintain navigable conditions in certain waterways. If dredging must be conducted in a location where hunting occurs, restrictions including a minimum buffer zone must be implemented to prevent boaters from entering the area until dredging is complete for the safety of both the hunters and dredging operators. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas	Physical occupation of space; hunting should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by boating avoid disrupting natural processes within these sites	Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized hunting areas during peak hunting seasons, issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.				
Habitat & Organisms	Air	Conditionally Compatible	Dredging impacts to Air (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by dredging operators. Dredging operators should maintain equipment to ensure air quality standards are not exceeded during operation.	Direct impact of exhaust from dredge equipment, Impact to transient birds in the sand extraction site	Adherence to dredging windows, potential restrictions during air quality action days		Coordinate with DNREC DAQ to identify and implement BMPs necessary to maintain air quality standards, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Water	Conditionally Compatible	Dredging impacts to Water (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by dredging operators. Dredging operators should maintain and operate equipment to ensure water quality standards are not exceeded during operation, including but not limited to total suspended solids or contamination from spills.	Dredging should not occur or be limited in sensitive resource areas, Poor water quality conditions may result when improper practices employed i.e. anoxia, resuspension of contaminated sediment, increased turbidity; risk of direct physical impacts to marine organisms through impingement or entrainment; alteration of wave patterns; interference with reproductive success of species through the disruption of spawning and migratory areas	Adherence to dredging windows to avoid disruption of spawning, feeding and migratory areas	Coordinate with resource agencies to identify and avoid or minimize activities in areas sensitive to dredging impacts such as nursery areas, shellfish beds and submerged aquatic vegetation if the dredging will have significant or long term impacts on the biologically productive area	Projects may not exceed the authorized incidental take limits on endangered and threatened species established by NOAA Fisheries Office of Protected Resources; incidental takes must be reported; hopper dredges must be equipped with sea turtle deflecting dragheads during months where sea turtles are present; use BMPs to prevent injuries to sea turtles, marine mammals and other species of concern, All dredging is to be conducted in a manner consistent with sound conservation and water pollution control practices; beneficial reuse of dredge materials is preferred, otherwise DNREC approval of a CDF site is required, projects shall utilize BMPs to ensure water quality standards are maintained or otherwise operation may be suspended, Adherence to dredging windows, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the affect on periods of peak production for habitat use (spawning, nesting etc)

DREDGING CONSIDERATIONS							
		Compatible (Y/N)	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Bottom	Conditionally Compatible	Dredging impacts to Bottom (habitat and organisms) may be significant and is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by dredging operators. Dredging activities may result in disturbance to benthic habitat, spawning and feeding grounds, and migratory pathways; displacement or destruction of benthic organisms, reduced biodiversity due to repeated disturbance. Coordination with resource agencies should occur to avoid or reduce impacts to sensitive benthic habitats through spatial or time of year restrictions. Dredging operators should maintain and operate equipment to ensure water quality standards are not exceeded during operation, including but not limited to total suspended solids or contamination from spills.	Dredging should not occur or be limited in sensitive resource areas,	Adherence to dredging windows to avoid disruption of spawning, feeding and migratory areas	Coordinate with resource agencies to identify and avoid or minimize activities in areas sensitive to dredging impacts such as nursery areas, shellfish beds and submerged aquatic vegetation if the dredging will have significant or long term impacts on the biologically productive area	Impacts to essential fish and other habitat may result in compensatory mitigation; Projects may not exceed the authorized incidental take limits on endangered and threatened species established by NOAA Fisheries Office of Protected Resources; incidental takes must be reported; hopper dredges must be equipped with sea turtle deflecting dragheads during months where sea turtles are present; use BMPs to prevent injuries to sea turtles, marine mammals and other species of concern, All dredging is to be conducted in a manner consistent with sound conservation and water pollution control practices; beneficial reuse of dredge materials is preferred, otherwise DNREC approval of a CDF site is required, projects shall utilize BMPs to ensure water quality standards are maintained or otherwise operation may be suspended, Adherence to dredging windows, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
Resources	Cultural/ Historical	N	Dredging is not compatible with cultural or historic resources. Coordination with resource agencies is required to avoid the damage or undermining of these resources that may result from dredging activities.	Dredging should not occur in areas identified as cultural and historical resource sites		Coordinate with cultural and historical agencies to identify and avoid cultural and historical resource sites.	Coordinate with cultural and historical agencies to conduct surveys prior to dredging to identify resources; if a site cannot be avoided, an in-depth investigation must be conducted; develop avoidance plans designed to protect sensitive resource sites near or adjacent to dredging activities; assess cultural or historic sensitivity of an area, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Viewscape	Conditionally Compatible	Dredge vessels may impede viewscapes but these impacts are temporary. Dredge disposal sites may result in more permanent viewscape impacts. Coordination should occur among all stakeholders to identify sites that minimize these impacts.	Placement of dredged material should be coordinated with stakeholders to either enhance natural habitat through beneficial reuse or be placed in an area that will limit impacts to sensitive viewscapes	Dredge vessels may temporarily impede viewscape; dredge disposal sites may temporarily or permanently alter viewscape	Select borrow sites and use procedures that would avoid or minimize damage to aesthetically pleasing features of marine sites	When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc), maintain open dialogue with community stakeholders to convey long term benefits over short term impacts to viewscapes

PORTS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	N	The siting of primary renewable energy infrastructure is not compatible with port operations as structures above or in the water increases the potential for interference with navigation safety. The utilization of ports as a landing site for associated infrastructure (i.e. transmission cables) may occur if cables and transmissions lines could be trenched or directionally bored to a depth sufficient to avoid damage to the cables and to not interfere with maintenance dredging operations.	Physical occupation of space; interference with navigation safety, avoid placement of renewable infrastructure in vessel operational areas.	Potential considerations during construction phase	Siting must consider safety of navigation and commercial impacts (transportation and delivery of goods). Consider transmission cable landings within ports.	Coordinate siting with port and port stakeholders to avoid impacts. Coordinate with USCG & NOAA OCS to update nautical charts.
	Pipelines and Cables	Conditionally compatible	Locating cables and pipelines within ports is conditionally compatible. Coordination between stakeholders and permitting agencies is required to avoid risks to navigation and interference with port operations such as maintenance dredging. To maximize compatibility, pipelines and cable routes should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The utilization of existing cable and pipeline landing sites within ports should be examined for future cable and pipelines. Coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential interference with navigation safety and port operation. Potential interference with navigation safety. Co-location possible with coordination. Benefit of co-location is that ports are commercially developed. Existing cable landings may potentially conflict with the development of new ports.	Potential considerations during construction phase or repair of cables/pipelines; impacts to navigation safety.	Site route to minimize impacts to existing port. Coordinate with port authorities to minimize impacts to port operations and prevent damage to vessels. Coordinate to utilize existing cable/pipeline landing sites within ports.	Cables must be "armored" and buried in areas where anchoring or scouring might occur; The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation

PORTS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Oil & LNG	Y	Oil and natural gas production generally presents no conflicts since the primary activity is located outside of port operation areas. Oil and natural gas transference is conditionally compatible with ports through coordination with responsible agencies to avoid issues with security, navigation safety, operational conflicts and contamination from spills. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential interference with navigation safety and port operation.	Potential considerations during construction phase; Scheduling LNG transport vessels in consideration with safety protocols.	Coordinate to avoid or reduce port or associated port traffic impacts to existing oil and LNG infrastructure; Coordinate with USCG to select site in order to limit navigation safety issues; Coordinate with oil/LNG entities to determine opportunities to co-locate landing sites or pipeline routing.	Preventative BMPs, including personnel training, equipment inspection and refueling procedures, should be implemented to minimize the risk of a spill; In the event of a spill, implementation measures should be outlined in operation and maintenance plan. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Coordinate with maritime and port authorities and oil and LNG entities to reduce the operational conflicts that may exist.
	Outfalls	Conditionally Compatible	Ports and outfalls are conditionally compatible. Coordination between responsible agencies is necessary to avoid areas that would compromise navigation safety and dredging issues. To maximize compatibility, outfalls should consider avoiding shipping channels and navigation routes unless they can be buried to the necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation..	Physical occupation of space; potential interference with navigation safety and port operation.	Potential considerations during construction phase	Coordinate with port authorities to avoid siting in areas that would compromise navigation safety.	Analyze data to ensure sediment accretion does not impact proposed area for outfall, or the outfall pipe is sufficiently buried and extends beyond maintenance dredging areas. Coordinate with USCG & NOAA OCS to update nautical charts.
Maritime	Dredging	Y	Dredging is required for the maintenance of ports. Coordination should occur between ports operators and users to reduce conflicts that could impact navigation safety, port operations, and dredge operations.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource, siting of ATONS would	Adherence to dredging windows; temporary impacts to port operations during dredging.	Evaluate sediment transport at potential port sites. Sites with lower sediment accretion rates requiring less maintenance dredging are preferable. Evaluate potential constructing docks and piers in navigable depths. Coordinate with fisheries agencies to identify and avoid sensitive resource areas, particularly important benthic communities.	Evaluate potential confined disposal or beneficial reuse sites when selecting port sites. Dredging depths cannot exceed existing controlling depth of the connecting or controlling waterway. Adhere to established dredging windows. When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Ports	Y	The siting of a new port near an existing port is compatible dependent upon coordination with all stakeholders and permitting agencies to ensure the new facility does not create any navigational hazards or impede operation of existing facility.	Physical occupation of space; siting would prohibit use of area as sand/gravel resource, siting of ATONS would	Adherence to dredging windows; temporary impacts to port operations during dredging.	Evaluate sediment transport at potential port sites. Sites with lower sediment accretion rates requiring less maintenance dredging are preferable. Evaluate potential constructing docks and piers in navigable depths. Coordinate with fisheries agencies to identify and avoid sensitive resource areas, particularly important benthic communities.	Evaluate potential confined disposal or beneficial reuse sites when selecting port sites. Dredging depths cannot exceed existing controlling depth of the connecting or controlling waterway. Adhere to established dredging windows. When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)

PORTS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessels	Y	Vessels and ports are intrinsically compatible. Cargo and tanker vessels utilize ports for transfers of shipped goods. Due to nature of service, ferry terminals generally operate with separate terminal infrastructure. Due to nature of service and security concerns, military terminals may operate separately from commercial ports and ferry terminals. Coordination should occur between port, vessel and federal stakeholders to ensure navigation safety is not comprised in the heavily trafficked areas leading up to and within the ports. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Ports and associated infrastructure should be sized appropriately to accommodate the vessels intended to use that location (berthing, maneuvering, safety)	Potential considerations during construction phase (rerouting vessels to avoid construction areas); Consideration of safety protocols when receiving vessels with hazardous payloads (LNG transports).	Ports and associated infrastructure should be sized appropriately to accommodate the vessels intended to use that location (berthing, maneuvering, and safety). Evaluate sediment transport at potential port sites. Sites with lower sediment accretion rates requiring less maintenance dredging are preferable. Evaluate potential constructing docks and piers in navigable depths.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with resources agencies ensure Spill Prevention, Control and Countermeasure (SPCC) Plans are developed and utilized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Anchorages	N	Although anchorages support port operations, the two activities are spatially incompatible due to the nature of their respective purposes. The siting of anchorages should be coordinated with port stakeholders to ensure the size and type vessels utilizing the port will have anchorage opportunities available if necessary. Additionally the siting of new anchorages should be coordinated to avoid impacting port operational activities and navigation safety into and out of the port. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Avoid siting new anchorages within existing or proposed port operational areas. Coordinate with USCG to avoid siting ports within an anchorage area or to evaluate potential to relocate anchorage.		Consider vessel traffic into ports before establishing new anchorages; The siting of anchorages should be coordinated with port stakeholders to ensure the size and type vessels utilizing the port will have anchorage opportunities available if necessary.	Coordinate with USCG & NOAA OCS to update nautical charts when new anchorages or ports are established.
	Vessel Routes/ATON	Y	Vessel routes and Aids to Navigation are compatible with ports as they support port operations and navigation safety leading to and into a port. When siting new ports, it is necessary to consider the ability to create new or utilize existing vessel routes of the size necessary to safely pilot vessels into ports. Coordinate with resource and permitting agencies to avoid or reduce impacts to any resources that may be impacted by the creation of new navigation channels, particularly if those routes will require dredging to maintain operational depths. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Vessels routes and ATONS should be appropriately sites to reduce navigational hazards entering and leaving ports operational areas.	Potential considerations during construction phase of ATONS or ports (rerouting vessels to avoid construction areas); Adherence to dredging windows; Vessel routes frequently require dredging requiring coordination to reduce interference with port operations.	When siting new ports, it is necessary to consider the ability to create new or utilize existing vessel routes of the size necessary to safely pilot vessels into ports.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with maritime and port authorities and USCG to reduce the operational conflicts that may exist.

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		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Security	Conditionally compatible	Security is required to various degrees for port operation to maintain safety and protection of vessels and cargo. When siting new ports, avoid areas with potential unexploded ordnances which can create hazards to port and port operations. Due to security concerns associated with specific port or vessel activities, i.e. military, oil or LNG vessels, certain activities or operations may have temporal limitations. These conflicts can be avoided or minimized with coordination between port management, US Coast Guard, and other necessary stakeholders.	Identifying and allowing for appropriate security boundaries for site specific operational plans.	Operational plans should be developed and implemented, identifying certain security and safety protocols and when they should be employed based on types of vessels and cargo entering the facility.	Avoid planning in identified danger zones, restricted areas and unexploded ordnance areas. Coordinate with port authorities to avoid siting in areas that would compromise navigation or operational safety. Vessels routes and ATONS accessing ports should be appropriately sites to prevent vessels from having to maneuver near or in restricted or secure zones.	Security Action Plans should be developed and implemented to address any potential condition or situation that may affect the operation of the facility. Coordinate security zones and security action pans with the USCG to ensure mariners are aware of temporal or spatial restrictions. Coordinate with USCG to issue notice to mariners when temporal restriction will occur.
Fishing & Recreation	Fishing Gear (Pelagic)	N	Fishing with pelagic fishing gear is incompatible within a port due to the conflicts with navigation safety and port operations and the potential for gear entanglement.	Avoid siting ports in or near important spawning or nursery grounds for commercial, recreational or RTE species.	Hazardous weather conditions can result in the accumulation of derelict fishing gear. Derelict fishing gear removal plans to ensure timely removal of these hazards.	Establish exclusion zones for the use of commercial or recreational fishing gear.	Coordinate with fishing industry stakeholders and resource agencies to identify and avoid impacting areas of significant importance to fisheries. Address the derelict fishing gear through program like the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through program like the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish a fishermen led derelict gear recovery program similar to those developed in other states.
	Fishing Gear (Bottom)	N	Fishing with bottom fishing gear is incompatible within a port due to the conflicts with navigation safety and port operations and the potential for gear entanglement.	Avoid siting ports in or near important spawning or nursery grounds for commercial, recreational or RTE species; Derelict fishing gear can create a navigational hazard to vessels through a tangled propeller or clogged intake*; commercial fishing does not occur in ports	Hazardous weather conditions can result in the accumulation of derelict fishing gear. Derelict fishing gear removal plans to ensure timely removal of these hazards.	Establish exclusion zones for the use of commercial or recreational fishing gear.	Coordinate with fishing industry stakeholders and resource agencies to identify and avoid impacting areas of significant importance to fisheries. Address the derelict fishing gear through program like the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through program like the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish fishermen led derelict gear recovery programs similar to those developed in other states.
	Aquaculture	N	Aquaculture and ports are incompatible activities due to conflicts with navigation safety and port operations and the potential for gear entanglement. Additionally, the water within a port has a higher potential for low quality due to the shear amount of vessel traffic and would not be conducive to aquaculture operations.	Vessel traffic, collision risks, impacts to shellfish; physical occupation of space; Co-location of aquaculture and port operations are not compatible due to physical occupation of space, interference with	Water quality impacts		Individual leases that unreasonably restrict access or obstruct access to upland properties (channels, creeks, marinas and docks) will not be approved; some vessel traffic is allowed over lease sites located in water depths greater than 5 feet.

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		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
				navigation safety, potential for aquaculture gear to detach and entangle propellers, water quality conditions not conducive for aquaculture facilities.			
	Swimming /Diving	Conditionally Compatible	Human safety and port security preclude swimming and diving from occurring in ports, with the exception of commercial diving associated directly with port operations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict.	Existing ports are avoided by recreationalists; swimming and diving at own risk, most likely will not overlap ; construction of new ports could impact water quality	Temporary closure of beaches during construction of a new port	Avoid construction during peak recreational season	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict.
	Surface Water Sports	Conditionally Compatible	Human safety and port security preclude Surface Water Sports from occurring in ports. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Interference with navigational safety; Physical occupation of space; potential interference with navigation safety and port operation. Safety and security zones should be established excluding surface water sport community from port operational areas.		Avoid construction during peak recreational season	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Conditionally Compatible	Conflicts with port operations, navigational safety, human safety and port security preclude recreational boating from occurring in ports. One exception would be the use of a port as a refuge from a storm which may be possible with proper coordination with the port authorities. Coordination with the USCG and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Interference with navigational safety; Physical occupation of space; potential interference with navigation safety and port operation. Safety and security zones should be established excluding recreational boaters from port operational areas.	Refuge from storms	Avoid construction during peak recreational season	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

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	Hunting	N	Conflicts with port operations, navigational safety, human safety and port security preclude hunting from occurring in ports. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Port operations; navigational and human safety; port security	Seasonal hunting	Hunting areas should not be established near areas that are heavily utilized by port activities	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.
Habitat & Organisms	Air	Conditionally compatible	Port operation impacts to Air (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by port operators and its users. Port and vessel activities may result in increased air emissions; therefore, port and vessel operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation. Port siting, construction and lighting could have negative impacts on avian activities. Conflicts with avian activities can be reduce or avoided by not siting or expanding ports in important foraging and breeding bird habitats (i.e. heronry, shorebird stopover sites), limiting construction activities to avoid impacts during avian migration and breeding seasons, and by altering light regimes during important migratory periods.	Physical occupation of space; minimize siting new or expand port areas in areas important to avian species for breeding, nesting, and foraging.	Limit construction activities to avoid impacts to avian migration and breeding seasons. Alter lighting regimes during important migratory periods.	Avoid siting or expanding ports in important foraging and breeding bird habitats (i.e. heronry, shorebird stopover sites)	Coordinate with resource agency to identify and avoid important avian breeding, nesting and foraging areas. Coordinate with resource agency to implement lighting BMPs to minimize impacts on avian species. Coordinate with permitting agency to implement emission control BMPS to reduce air pollution.

PORTS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Water	Conditionally compatible	Port operations have the potential to impact Water (habitat and organisms) and are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by port operators and its users. Port activities could result in increased water pollution through regular vessel operation, spills, and increased turbidity from dredging operations. To reduce these impacts, port operators and users should maintain and operate equipment to ensure water quality standards are not exceeded during operation, including contamination from spills, evaluate water flow at potential locations to ensure port would have adequate circulation to reduce water quality issues, and avoid siting near water intake structures. During periods of maintenance dredging, implement BMPs to minimize impacts from dredging operations (i.e. turbidity curtains, minimize marine organism impacts through impingement or entrainment). Port siting, construction, operation and maintenance could have could have negative impacts on fisheries. To reduce conflicts with important fisheries, adhere to all permitting requirements, avoid siting ports at or near important fishery foraging or breeding grounds, and avoid impacts to breeding or migratory periods by adhering to all time-of-year restrictions during construction or maintenance activities. Vessels may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality.	Avoid siting water intake locations.	Potential considerations during construction phase of ports; Adherence to dredging windows to reduce fisheries impacts.	Evaluate water flow at potential locations to ensure port would have adequate circulation to reduce water quality issues. Evaluate fisheries date to avoid siting ports in areas of significant fish use.	Coordinate with resources agencies ensure Spill Prevention, Control and Countermeasure (SPCC) Plans are developed and utilized and surface water quality standards are not exceeded. During periods of maintenance dredging, implement BMPs to minimize impacts from dredging operations (i.e. turbidity curtains, minimize marine organism impacts through impingement or entrainment). Projects may not exceed the authorized incidental take limits on endangered and threatened species established by NOAA Fisheries Office of Protected Resources; Impacts to essential fish and other habitat may result in compensatory mitigation; All dredging is to be conducted in a manner consistent with sound conservation and water pollution control practices; beneficial reuse of dredge materials is preferred, otherwise DNREC approval of a CDF site is required, projects shall utilize BMPs to ensure water quality standards are maintained or otherwise operation may be suspended, Adherence to dredging windows, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes. When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Bottom	Conditionally compatible	Port operations have the potential to impact Bottom (habitat and organisms) and are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by port operators and its users. Port activities could result in increased water pollution that could impact benthic habitats through regular vessel operation, spills, and increased turbidity from dredging operations. To reduce these impacts, port operators and users should maintain and operate equipment to ensure water quality standards are not exceeded during operation, including contamination from spills, evaluate water flow at potential locations to ensure port would have adequate circulation to reduce water quality issues and to naturally maintain safe operation depth to reduce the need for dredging. During periods of maintenance dredging, implement BMPs to minimize impacts from dredging operations (i.e. turbidity	Physical occupation of space, avoid areas with high shoaling rates to decrease required maintenance.	Potential considerations during construction phase of ports; Adherence to dredging windows to reduce fisheries impacts.	Evaluate sediment transport at potential port sites. Sites with lower sediment accretion rates requiring less maintenance dredging are preferable. Evaluate potential constructing docks and piers in navigable depths. Coordinate with fisheries agencies to identify and avoid sensitive resource areas, particularly important benthic communities.	Impacts to essential fish and other habitat may result in compensatory mitigation; Projects may not exceed the authorized incidental take limits on endangered and threatened species established by NOAA Fisheries Office of Protected Resources; incidental takes must be reported; use BMPs to reduce impacts on marine life (i.e. hopper dredges must be equipped with sea turtle deflecting dragheads during months where sea turtles are present). All dredging is to be conducted in a manner consistent with sound conservation and water pollution control practices; beneficial reuse of dredge materials is preferred, otherwise DNREC approval of a CDF site is required, projects shall utilize BMPs to ensure water quality standards are maintained or otherwise operation may be suspended, Adherence to dredging windows, utilize dredging practices to allow for rapid restoration of bottom topography through

PORTS CONSIDERATIONS							
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			curtains, minimize marine organism impacts through impingement or entrainment). Port siting, construction, operation and maintenance could have could have negative impacts on fisheries. To reduce conflicts with important fisheries, adhere to all permitting requirements, avoid siting ports at or near important fishery foraging or breeding grounds, and avoid impacts to breeding or migratory periods by adhering to all time-of-year restrictions during construction or maintenance activities.				natural processes. When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
Resources	Cultural/Historical	N	Port construction and operational activities are incompatible to protecting cultural and historical resource areas. Typically, fill, dredging, and bulkhead construction are required that could all negatively affect a resource. Historic ports still in operation should be maintained in a manner that will ensure the remaining historic qualities and components may be preserved. Coordination with resource agencies should occur to avoid or minimize negative impacts to cultural or historic resources.	Avoid siting ports in areas of with significant cultural and historic resources.		Coordinate with resource agency to identify and avoid areas of significant cultural and historic resources.	Coordinate with cultural and historical agencies to conduct surveys prior to siting or constructing ports to identify resources; if a site cannot be avoided, an in-depth investigation must be conducted; develop avoidance plans designed to protect sensitive resource sites near or adjacent to construction activities; assess cultural or historic sensitivity of an area.
	Viewscape	N	New ports are not natural viewscapes nor are they generally considered pleasant developed viewscapes. To avoid or minimize conflicts, coordination should occur with all areas stakeholders when siting new or expanding existing ports.	Avoid siting ports in areas considered to have exceptional viewscapes or in areas where natural viewscapes are already limited.		Coordinate with community stakeholders to identify areas to avoid or means to minimize viewscape impacts.	

VESSELS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Y	The operation of vessels near renewable energy infrastructure must be limited and conducted with caution to avoid negative impacts to the either the vessels or the infrastructure. Vessel size and type should be restricted within a wind turbine array to ensure adequate maneuverability to prevent collision with the infrastructure. A buffer should be established around wave energy collection devices in which vessel operation should be prohibited to prevent interference with navigation safety (e.g. collision, entanglement). Tidal turbines should be installed at a depth such that vessels of reasonable drafts could pass over without risk of entanglement. When siting renewable energy infrastructure, coordination should be conducted to avoid siting in areas of high vessel traffic (e.g. recreation areas, navigation routes).	Physical occupation of space; interference with navigation safety	Possible interference during the construction phase	Renewable energy infrastructure should not be sited within navigation channels, anchorages or obstruct ATON; Coordinate with coast guard to reduce impacts to future vessel uses.	Coordinate with USCG & NOAA OCS to update nautical charts. Appropriate mitigation measures must be used to during and after construction to promote navigation safety; armor and bury cables in areas where anchoring and scouring may occur; implement mariner education; and exploration of technology upgrades to mitigate some radar issues; coordinate with federal authorities to determine vessel type restrictions, anchoring in energy areas is prohibited. A buffer should be established around wave energy collection devices in which vessel operation should be prohibited to prevent interference with navigation safety (e.g. collision, entanglement).
	Pipelines and Cables	Conditionally compatible	Without adequate coordination between responsible agencies and stakeholders, additional pipelines and cables could create spatial conflicts with vessels, including displacement of shipping activities from exclusion zones around a pipeline and interference with navigation safety. To maximize compatibility, pipelines and cables should consider avoiding vessel routes. If vessel routes cannot be avoided, the top of the cable or pipeline should be located a minimum of 4 feet below the existing bottom elevation and backfilled with suitable heavy material to a preconstruction bottom elevation. USCG should be contacted before construction to notify vessel operators of precautions to use when operating near installation equipment. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; Displacement of shipping activities within exclusion zone around pipeline; interference with navigation safety.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordinate with shipping stakeholders to minimize impacts to vessel operation and navigation.	Cables must be "armored" and/or buried to avoid vessel impacts. Bury cables in areas where maintenance dredging will be required. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

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	Oil & LNG	N	Vessels and oil and natural gas are not compatible due to safety exclusion zones surrounding primary energy production facilities, other than those directly associated with facility safety and operations. Geological and geophysical surveys for oil and natural gas exploration have the potential to interfere with navigation safety and vessel operations. Mariners should be alerted to geological and geophysical surveys being conducted in an area to avoid interference. Oil and natural gas siting options should be evaluated to avoid those areas frequently travel by vessels, e.g. established navigation routes or other areas heavily utilized by commercial or recreational boaters.	Physical occupation of space; safety exclusion zones; only vessels directly associated with oil/LNG operations unrestricted; Geological and geophysical surveys for oil and natural gas exploration have the potential to interfere with navigation safety and vessel operations.	Interference with navigation safety during G&G surveys	Avoid siting oil and LNG sites and infrastructure in high traffic areas or navigation channels; Oil and natural gas siting options should be evaluated to avoid those areas frequently travel by vessels, e.g. established navigation routes or other areas heavily utilized by commercial or recreational boaters.	Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements
	Outfalls	Conditionally Compatible	Vessels and outfalls are conditionally compatible depending on the location and type of outfall. Coordination between responsible agencies and stakeholder groups is necessary to avoid siting outfalls in heavily used areas that would compromise navigation safety. If a proposed outfall can be buried, construction must follow necessary depths required by permitting agencies. Anchoring restrictions should be implemented in located where outfalls may be physically damaged. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; compatible with coordination to avoid interference with navigation safety and dredging issues	Potential considerations during construction phase	Coordinate with USCG and maritime stakeholders to avoid siting in high traffic areas to avoid interference with navigation safety or navigation channels due to maintenance dredging issues.	Sufficiently bury pipe and extend outfall beyond maintenance dredging/navigation channel areas. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Maritime	Dredging	Y	Dredging is necessary to maintain navigable conditions in certain waterways. Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified waterways in order to avoid impacts to navigation safety. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; vessels and dredging equipment could not operate at same time and place	Adherence to dredging windows; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety	Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified waterways in order to avoid impacts to navigation safety.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc); Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

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	Ports	Y	Vessels and ports are intrinsically compatible. Cargo and tanker vessels utilize ports for transfers of shipped goods. Due to nature of service, ferry terminals generally operate with separate terminal infrastructure. Due to nature of service and security concerns, military terminals may operate separately from commercial ports and ferry terminals. Coordination should occur between port, vessel and federal stakeholders to ensure navigation safety is not comprised in the heavily trafficked areas leading up to and within the ports. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Ports and associated infrastructure should be sized appropriately to accommodate the vessels intended to use that location (berthing, maneuvering, safety)	Potential considerations during construction phase (rerouting vessels to avoid construction areas); Consideration of safety protocols when receiving vessels with hazardous payloads (LNG transports).	Ports and associated infrastructure should be sized appropriately to accommodate the vessels intended to use that location (berthing, maneuvering, and safety). Evaluate sediment transport at potential port sites. Sites with lower sediment accretion rates requiring less maintenance dredging are preferable. Evaluate potential constructing docks and piers in navigable depths.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with resources agencies ensure Spill Prevention, Control and Countermeasure (SPCC) Plans are developed and utilized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Vessels	Conditionally Compatible	Vessels are generally compatible, although spatial conflicts may exist depending size and type of vessel and security concerns. Coordination with the US Coast Guard and vessel stakeholder groups is important to avoid or reduce conflicts occurring when one or more vessels attempt to occupy the same area. Vessel operators should adhere to all safety regulations implemented within a region to safe vessel operation and navigation.	Spatial conflicts may exist depending size and type of vessel and security concerns			Coordination with the US Coast Guard and vessel stakeholder groups is important to avoid or reduce conflicts occurring when one or more vessels attempt to occupy the same area. Vessel operators should adhere to all safety regulations implemented within a region to safe vessel operation and navigation.
	Anchorages	Y	Vessels rely on anchorages for various operational and safety needs, including providing a location to moor until conditions are safe to travel into port or weather conditions improve. Siting of anchorages should be coordinated with vessel stakeholders to ensure proper sizing and useful site selection. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Size of anchorage should be sufficient to safely host a minimum number of vessels; locations should not directly interfere with navigation safety (i.e. vessel routes, channels); depth of anchorage should be sufficient for the types of vessels utilizing the area.	Vessels shall not occupy a prescribed anchorage for greater than 48 hrs. without a permit from the Captain of the Port	Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Coordinate with maritime stakeholders when siting to ensure feasibility of location. Siting must follow Regulations for anchorages (33 CFR Part 110).	All carriers must adhere to all applicable ballast water management rules and regulations. All vessels utilizing anchorages must adhere to Regulations for anchorages (33 CFR Part 100); Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Vessel Routes/ATON	Y	Vessels rely on established vessels routes with properly placed aids to navigation for safe passage. When establishing a new vessel route, evaluate the vessel traffic and patterns to ensure new routes would not create additional conflicts. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Routes should avoid areas to could create hazards and interfere with navigational safety.	Adherence to dredging windows; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety. ATONs should be placed as soon as a hazard is identified or a new route is established to	ATONs should be sited based rules outline sin the USCG Aids to Navigation Manual. Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Siting routes along areas that naturally have lower sediment accretion rates requiring less maintenance dredging is preferable.	When maintenance dredging beneficial reuse of dredge materials is preferred, otherwise DNREC approval of a CDF site is required; projects shall utilize BMPs to ensure water quality standards are maintained or otherwise operation may be suspended; Adherence to dredging windows. Placement of private ATONs must adhere to the USCG rules for PATONs. Coordinate with USCG & NOAA OCS to update nautical charts.

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					avoid interference with navigation safety.		
	Security	Conditionally Compatible	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. The type of security or restriction in a specific area will dictate the amount and type of vessel activity allowed within or near the area, if any.	New security or restricted areas should be size sufficiently to provided protections without excessively interfering with other users in the area.	Specific event driven security or area restrictions could interfere with navigation or other uses in the area.	Security or restricted areas should be established where critical port infrastructure and operations exist; risks (threats, vulnerabilities, and consequences) have been identified; or areas of critical resources have been established.	If specific event driven security or restriction areas are required, consideration must be made to minimize impacts to other users/stakeholders in the area. Coordinate with USCG to issue a mariners notice announcing temporary restrictions. Coordinate with USCG & NOAA OCS to update nautical charts to identify permanent restrictions. When considering the establishment of resource protection areas, coordinate with all stakeholders in disseminate information on the issues, and received input on potential conflicts that may result.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	Fishing Gear (pelagic) and vessels are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes/ports). Safe operating distance should be maintained between vessels and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program.	Higher vessel traffic on the bay and river, decreased fish habitat, decreased recreational opportunity; derelict fishing gear can create a navigational hazard to vessels through a tangled propeller or clogged intake*; Physical occupation of space; Safe operating distance should be maintained between vessels and boats/vessels operating with deployed fishing gear (trawls, nets). Safe operating distance should be maintained between vessels and deployed gear (hook and line). Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes)	Fishing gear should avoid being deployed at night in areas which would result in interference with navigation with proper lighting or beacon aids.	Coordinate with resource agency and commercial and recreational fishing stakeholders reduce or avoid siting vessel routes in important fishery grounds. Establish exclusion zones for the use of commercial or recreational fishing gear.	Coordinate with fishing industry stakeholders and resource agencies to identify and avoid impacting areas of significant importance to fisheries. Address the derelict fishing gear through program like the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through program like the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish a fishermen led derelict gear recovery program similar to those developed in other states; Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program.

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		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Fishing Gear (Bottom)	Conditionally Compatible	Fishing Gear (bottom) and vessels are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes/ports). Safe operating distance should be maintained between vessels and boats/vessels operating with deployed, deploying or retrieving fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or adrift or by a resource agency through a derelict gear clean-up program.	Physical occupation of space; Safe operating distance should be maintained between vessels and boats/vessels operating with deployed fishing gear (trawls, nets). Safe operating distance should be maintained between vessels and deployed gear (hook and line). Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes)	Fishing gear should avoid being deployed at night in areas which would result in interference with navigation with proper lighting or other aids.	Consider various levels of government and other stakeholders are considered in the policy process; Coordinate with resource agency and commercial and recreational fishing stakeholders reduce or avoid siting vessel routes in important fishery grounds.	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes, ports). Safe operating distance should be maintained between vessels and boats/vessels operating with deployed, deploying or retrieving fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or adrift or by a resource agency through a derelict gear clean-up program.
	Aquaculture	N	The operation of vessels is incompatible with aquaculture due to conflicts with navigation safety and port operations and the potential for gear entanglement. Additionally, vessels have the potential affect water quality which could negatively impact an aquaculture operation. When siting, aquaculture facilities should avoid high vessel traffic areas (navigation routes/ports). Vessels operators should maintain as safe buffer between vessels and aquaculture facilities. Aquaculture facilities should be clearly marked using aids-to-navigation to reduce conflict.	Physical occupation of the same space at the same time (competition); impacts to species in aquaculture facilities	Water quality impacts	When siting, aquaculture facilities should avoid high vessel traffic areas (navigation routes/ports)	Vessels operators should maintain as safe buffer between vessels and aquaculture facilities. Aquaculture facilities should be clearly marked using aids-to-navigation to reduce conflict.
	Swimming /Diving	N	Swimming and diving are incompatible with large vessel traffic due to conflict with human safety and security, with the exception of commercial diving associated directly with vessel maintenance. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.	Not compatible in the same area; incompatible with large vessel traffic, mostly occurs in shallow water without large vessel interference			Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.

VESSELS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Surface Water Sports	N	Surface water sports and vessel activity is incompatible and should be avoided due to interference with vessel navigational safety, human safety, potential collision risks, and security concerns. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Higher traffic on the bay and river, decreased recreational opportunity; users use the wake of boats for recreation	Increased seasonal traffic	Routes for larger vessels should established and clearly marked with ATONs.	Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Conditionally Compatible	Boating and vessels are compatible if all navigation and safety regulations are observed by boat/vessel operators. Due an increased risk of collision and interference with navigation safety, a minimum safe operating distance should be adhered to when boating near large vessels. Depending on size and type of vessel exclusion buffers surrounding certain vessels may be larger than others. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Conflicts with commercial vessels, decreased recreational opportunity, increased sound will interfere with social animal communication, increase in marine animal strikes		Consider various levels of government and other stakeholders are considered in the policy process*	Due an increased risk of collision and interference with navigation safety, a minimum safe operating distance should be adhered to when boating near large vessels. Depending on size and type of vessel exclusion buffers surrounding certain vessels may be larger than others. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Hunting	Conditionally Compatible	Hunting is incompatible in areas where vessels are operating due to increase risk to human safety, damage to vessels, and security concerns. Hunting should be prohibited in areas of high vessel traffic. Vessel operators should avoid areas designated for hunting activities during hunting seasons. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Competition for space; increase risk to human safety, damage to vessels and security concerns	Seasonal hunting; presence of vessels	Hunting areas should not be established near areas that are heavily utilized by vessels	Hunting should be prohibited in areas of high vessel traffic. Vessel operators should avoid areas designated for hunting activities during hunting seasons. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.

VESSELS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Habitat & Organisms	Air	Conditionally Compatible	Vessel impacts to Air (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Vessel activities may result in increased air emissions; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Environmental considerations; Vessel emissions could impact air quality.	Potential for emissions to increase with seasonal increased boat traffic		Vessels must comply with the EPA's emission standards adopted for new marine diesel engines; ships must comply with Emission Control Area (ECA) standards to reduce emissions; vessel operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.
	Water	Conditionally Compatible	The potential impact vessels may have on Water (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Vessel activities may result in negative impacts to water quality as a result of normal operation, increased marine debris, ballast water discharge or accidental spills; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation. Vessels should avoid marine protected areas and other sensitive resource areas. To reduce strikes with marine mammals, vessel operators should adhere to seasonal speed restriction and should be aware of the presence of marine mammals in their vicinity to avoid collision. Vessels may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality.	Environmental considerations; potential for spills; increased marine debris, increased sound will interfere with social animal communication, increase in marine animal strikes	Vessels should adhere to seasonal speed restriction to avoid marine mammal strikes.	Vessels should avoid marine protected areas and other sensitive resource areas	All carriers must adhere to all applicable ballast water management rules and regulations. Coordinate with DNREC Division of Water Resources and EPA Region III to identify and implement BMPs to avoid or minimize water pollutants during operation. Preventative BMPs, including personnel training, equipment inspection and refueling procedures, should be implemented to minimize the risk of a spill; In the event of a spill, oil spill alert and recovery plans should be activated; Plan to contain marine debris, reduce long term impacts from surfactants and contamination. Employ protected species observers on vessels to avoid strikes.
	Bottom	Conditionally Compatible	Vessels have the potential to impact Bottom (habitat and organisms) and are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Vessel activities may result in negative impacts to water quality as a result of normal operation, increased marine debris or accidental spills; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation. Additionally, anchoring can significantly impact benthic habitat, including sensitive resource areas and essential fish habitats. Vessels should attempt to always anchor in designated anchorages, and if one is not available, avoid anchoring in marine protected areas or other sensitive resource areas.	Environmental considerations; anchor damage to benthic habitat; impacts to aquatic organisms from ballast water discharge, potential for spills; Vessel routes should avoid sensitive resource areas. Vessels should in anchor in designated areas to avoid bottom impacts.	Adhere to dredging windows when maintaining navigation routes.	Designated anchorages should be established to reduce impacts to benthic habitat.	Coordinate with DNREC Division of Water Resources and EPA Region III to identify and implement BMPs to avoid or minimize water pollutants during operation. Preventative BMPs, including personnel training, equipment inspection and refueling procedures, should be implemented to minimize the risk of a spill; In the event of a spill, oil spill alert and recovery plans should be activated;

VESSELS CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Resources	Cultural/Historical	Conditionally Compatible	The operation of vessels is conditionally compatible with cultural and historic resources. Depending on the location and depth of the cultural or historic resource, vessel may be able to pass over without impacts. However, these locations should be identified to restrict anchoring to prevent physical damage. Potential effects may occur on shorelines from vessel wakes. Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce these impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur.	Reduce vessel speed in historic and cultural areas sensitive to wave action. Do not establish anchorages in historic and cultural areas.		Coordinate with state and federal historic offices determine historical/cultural impacts at sites, establish vessel routes and anchorages to avoid impacts to important sites and resources.	Clearly designated historic and cultural resource areas as not anchor zones. Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce these impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur.
	Viewscape	Conditionally Compatible	Vessel impact on viewscape is the eye of the beholder. Visual impacts are generally temporary, depending on location. Those areas located near docking facilities, wharfs, or ferry terminals may experience additional visual impacts. The siting of new docking facilities should be coordinated with all potential stakeholders to determine how impacts may be avoided or minimized.	Location dependent		Coordinate with community stakeholders to identify and avoid areas of higher use or more scenic value.	

ANCHORAGES CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	N	Renewable energy infrastructure and anchorages are incompatible activities due to increased risks to navigation safety, entanglement or damage to infrastructure.	Physical occupation of space; interference with navigation safety and impacts to infrastructure		Renewable energy infrastructure should avoid existing and proposed anchorages.	
	Pipelines and Cables	N	Pipelines and cable should not be installed within anchorages. These uses cannot occupy the same location due to the potential for damaging pipelines and cables while anchoring.	Physical occupation of space; potential for damaging pipelines and cable when anchoring		Avoid siting cables and pipelines in anchorages	
	Oil & LNG	N	Anchorages are not compatible with oil and natural gas production or transference due to potential interference with navigation safety and damage or undermining of infrastructure from collision or anchoring.	Physical occupation of space; interference to navigation safety;		Coordinate with USCG to avoid siting oil and LNG infrastructure in anchorages; Avoid locating anchorages near existing or proposed oil and LNG sites or infrastructure.	
	Outfalls	N	Anchorages and outfalls are incompatible due to conflicts with navigation safety and potential damage or undermining of outfall infrastructure. Outfalls should avoid siting in areas of existing or proposed anchorage sites.	Physical occupation of space; can be co-located in close proximity if overall discharge is taken into consideration so as to not exceed state water quality standards.	Potential considerations during construction phase	Outfalls should avoid siting in areas of existing or proposed anchorage sites.	Ensure cumulative discharge does not exceed state water quality standards. Coordinate with USCG & NOAA OCS to update nautical charts.
Maritime	Dredging	Conditionally Compatible	Dredging within anchorages is conditionally compatible. Coordination must occur to prevent interference with anchorage operations and navigation safety. Anchorage siting options should be evaluated to avoid sand resource and gravel extraction areas as continual disturbance from anchoring may negatively impact this resource.	Physical occupation of space; Vessels at anchor could interference with dredging operation.	Adherence to dredging windows; temporary impacts to anchorage availability during dredging.	Coordination must occur to prevent interference with anchorage operations and navigation safety.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted.
	Ports	N	Although anchorages support port operations, the two activities are spatially incompatible due to the nature of their respective purposes. The siting of anchorages should be coordinated with port stakeholders to ensure the size and type vessels utilizing the port will have anchorage opportunities available if necessary. Additionally the siting of new anchorages should be coordinated to avoid impacting port operational activities and navigation safety into and out of the port. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Avoid siting new anchorages within existing or proposed port operational areas. Coordinate with USCG to avoid siting ports within an anchorage area or to evaluate potential to relocate anchorage.		Consider vessel traffic into ports before establishing new anchorages; The siting of anchorages should be coordinated with port stakeholders to ensure the size and type vessels utilizing the port will have anchorage opportunities available if necessary.	Coordinate with USCG & NOAA OCS to update nautical charts when new anchorages or ports are established.

ANCHORAGES CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessels	Y	Vessels rely on anchorages for various operational and safety needs, including providing a location to moor until conditions are safe to travel into port or weather conditions improve. Siting of anchorages should be coordinated with vessel stakeholders to ensure proper sizing and useful site selection. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Size of anchorage should be sufficient to safely host a minimum number of vessels; locations should not directly interfere with navigation safety (i.e. vessel routes, channels); depth of anchorage should be sufficient for the types of vessels utilizing the area.	Vessels shall not occupy a prescribed anchorage for greater than 48 hrs. without a permit form the Captain of the Port	Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Coordinate with maritime stakeholders when siting to ensure feasibility of location. Siting must follow Regulations for anchorages (33 CFR Part 110).	All carriers must adhere to all applicable ballast water management rules and regulations. All vessels utilizing anchorages must adhere to Regulations for anchorages (33 CFR Part 100); Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Anchorages	Conditionally Compatible	The siting of new anchorages should be coordinated to reduce interfering with existing anchorages. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.			The siting of new anchorages should be coordinated to reduce interfering with existing anchorages.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Vessel Routes/ATON	Conditionally compatible	Anchorages and vessel routes are complementary activities. While they cannot occupy the same physical space, they are necessary features for areas with heavy shipping. Siting of new anchorages should be coordinated with maritime stakeholder groups to ensure vessel routes can be established to provide access. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Avoid siting anchorages within established vessel routes. Use appropriate ATON to mark anchorages		Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Coordinate with maritime stakeholders when siting to ensure feasibility of location. Siting must follow Regulations for anchorages (33 CFR Part 100).	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Security	Y	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. The establishment of an anchorage is counter to the intent of these restrictions.	Vessel traffic needs routes and ATON to prevent collisions and guide vessels to their destination		Avoid siting new anchorages in heavily used areas	Vessels of less than 20 meters in a special anchorage area are not required to exhibit anchor lights or shapes required by rule 30 of the Inland Navigation Rules*
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally compatible	Pelagic fishing gear use and anchorages are conditionally compatible. Use of pelagic fishing gear within an anchorage would not conflict with primary use of the anchorage is dependent upon the presence and type of vessels within the anchorage. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist. Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas	Improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety	Avoid fishing in anchorages during periods of high/increased vessels use. Avoid fishing with pelagic gear in periods of intense or hazardous weather to minimize gear loss.	Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized.	If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish fishermen led derelict gear recovery program (similar to Northern California programs). Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas

ANCHORAGES CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.				and to ensure placement of proper aids-to-navigation; Fishing vessel operators must following maritime regulations pertaining to the operation of vessels within anchorages and ensure all gear is retrieved to reduce hazards to other vessels.
	Fishing Gear (Bottom)	Conditionally compatible	Bottom fishing gear use and anchorages are conditionally compatible. Use of bottom fishing gear within an anchorage would not conflict with primary use of the anchorage is dependent upon the presence and type of vessels within the anchorage. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist. Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Derelict fishing gear can create a navigational hazard to vessels through a tangled propeller or clogged intake*		Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Coordinate with resource agency and fishery stakeholder groups to avoid designating anchorages in areas of high recreational or commercial fishing use.	If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist. Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Aquaculture	N	Aquaculture and anchorages are incompatible activities due to conflicts with navigation safety and anchorage operations and the potential for gear entanglement. Siting of new anchorages should be coordinated with resource agencies to avoid those areas utilized by aquaculture operations.	Physical occupation of the same space at the same time (competition)	During a storm, damaged systems could create a navigational hazard*	The siting of new aquaculture facilities should be coordinated to reduce interfering with existing anchorages.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.; Some vessel traffic is allowed over lease sites located in water depths greater than 5 feet.**
	Swimming /Diving	Conditionally compatible	Swimming and Diving within anchorages is conditionally compatible and is dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security and navigation issues, with the exception of commercial diving associated directly with vessel maintenance. Those engaging in swimming and diving activities within an anchorage should maintain minimal distances from anchored vessels and should give right of way to vessels entering or departing from anchorages.	Increased vessel traffic with new anchorages; vessel type; collision risks			Conflicts may occur due to risks associated with human safety, security and navigation issues, with the exception of commercial diving associated directly with vessel maintenance. Those engaging in swimming and diving activities within an anchorage should maintain minimal distances from anchored vessels and should give right of way to vessels entering or departing from anchorages.

ANCHORAGES CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Surface Water Sports	Conditionally compatible	Surface water sports within anchorages are conditionally compatible and are dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security, navigation issues and increased potential for collision risks. Those engaging in surface water sports within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased vessel traffic with new anchorages; vessel type; collision risks	Increased seasonal vessel traffic	Avoid construction in important recreational activity areas	Those engaging in surface water sports within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Conditionally Compatible	Boating within anchorages is conditionally compatible and is dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security, navigation issues and increased potential for collision risks. Those engaging in boating activities within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased vessel traffic with new anchorages; vessel type; collision risks	Increased seasonal vessel traffic	Avoid construction in important recreational activity areas	Those engaging in boating activities within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Hunting	Conditionally Compatible	Hunting is conditionally compatible within anchorages depending on the presence of vessels. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Create de-facto exclusion zone and have higher occurrence of spills	Seasonal hunting; presence of vessels within or going to an anchorage	Avoid establishing new anchorages in designated hunting areas	Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.

ANCHORAGES CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Habitat & Organisms	Air	Conditionally Compatible	Anchorage impacts to Air (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Vessel activity and abundance may result in increased air emissions; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Increased air emissions;	Seasonal increased boat traffic and emissions		Vessel operators must adhere to all regulations by resource and permitting agencies; vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation.
	Water	Conditionally Compatible	The potential impact anchorages may have on Water (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Vessel activity and abundance within the anchorage may result in negative impacts to water quality as a result of normal operation, increased marine debris, ballast water discharge or accidental spills; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation. When siting new anchorages, coordination with resource agency to occur to avoid or minimize sensitive resource areas.	negative impacts to water quality as a result of normal operation, increased marine debris, ballast water discharge or accidental spills			Vessel operators must adhere to all regulations by resource and permitting agencies; vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation.
	Bottom	Conditionally Compatible	The potential impact anchorages may have on Bottom (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Anchoring may result in negative impacts to benthic habitat, spawning and feeding grounds, and migratory pathways, displacement or destruction of benthic organisms and reduced biodiversity due to repeated disturbance. When siting new anchorages, coordination with resource agency should occur to avoid or minimize impacts to essential fish habitats or other sensitive resource areas.	Negative impacts to benthic habitat, spawning and feeding grounds, and migratory pathways, displacement or destruction of benthic organisms and reduced biodiversity due to repeated disturbance.		When siting new anchorages, coordination with resource agency should occur to avoid or minimize impacts to essential fish habitats or other sensitive resource areas.	Vessel operators must adhere to all regulations by resource and permitting agencies; vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation.
Resources	Cultural/Historical	N	Anchorages are incompatible with cultural and historical resource areas. The physical damage occurring from anchoring cannot be avoided or minimized within an anchorage. Coordination with resource agencies should occur to avoid siting anchorages in or near sensitive cultural or historic resources.	Shipwrecks have been effected by anchor lines		Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance.	Conduct surveys prior to construction activities to identify significant resources; if a site cannot be avoided, an in-depth investigation must be conducted** Include state historical groups and local tribes in the planning process

ANCHORAGES CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Viewscape	Conditionally Compatible	Viewscape impacts resulting from an anchorage, while reoccurring are temporary. To avoid or minimize conflicts, coordination should occur with all area stakeholders when siting new anchorage to avoid or minimize impacts to prominent viewscapes.	New anchorages would impede viewscape		To avoid or minimize conflicts, coordination should occur with all area stakeholders when siting new anchorage to avoid or minimize impacts to prominent viewscapes.	

VESSEL ROUTES/ATON CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	The placement of renewable energy infrastructure in or near established vessel routes is not compatible due to risks to navigation safety, including collision and entanglement, and the potential damage that may be caused to the renewable energy infrastructure. Ensuring the placement of proper Aids to Navigation is necessary when siting energy infrastructure. | When siting renewable energy infrastructure, avoid siting in areas of high vessel traffic (e.g. recreation areas, navigation routes). Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas in or around the energy infrastructure and to ensure placement of proper aids-to-navigation.	Physical occupation of space; conflict with renewable energy facilities, interference with navigation safety and impacts to infrastructure;	Potential considerations during construction phase	Coordinate with USCG to reduce conflicts with vessel navigation routes and reposition ATONS if necessary; do note site new renewable energy infrastructure in existing navigation routes;	Coordinate with USCG & NOAA OCS to update nautical charts. Appropriate mitigation measures must be used to during and after construction to promote navigation safety; armor and bury cables in areas where anchoring and scouring may occur; implement mariner education and exploration of technology upgrades to mitigate some radar issues; coordinate with federal authorities to determine vessel type restrictions, anchoring in energy areas is prohibited.
	Pipelines and Cables	Conditionally compatible	Locating pipelines and cables in or near vessel routes is conditionally compatible. Coordination with stakeholders and permitting agencies must be conducted in order to reduce the potential conflict created by these activities. Potential conflicts include creation of exclusion zones and displacement of vessel activities during construction or maintenance which may result in interference with navigation safety and an increase water congestion and damage to pipelines and cables resulting from vessel activity or maintenance dredging. If vessel routes cannot be avoided, the top of the cable or pipeline should be located a minimum of 4 feet below the existing bottom elevation and backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Additional coordination with permitting agencies is necessary as deeper depths may be required depending upon location. Coordination with USGS should include minimizing or avoiding impacts to vessel traffic and current or proposed ATONS notifying vessel operators of precautions to use when operating near installation equipment. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; potential for damaging pipelines and cable when anchoring; potential conflicts when maintaining vessel routes	Displacement of vessel activities during construction; exclusion zones around construction/maintenance vessels may increase water congestion; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordination with USCG to minimize or avoid impact to vessel traffic and current or proposed ATONs. Coordinate with USACE to ensure proper placement and protection of pipelines and cables.	The top of the cable or pipeline crossing navigable waters shall be located a minimum of 4 ft feet below the existing bottom elevation and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. The top of the cable or pipeline crossing federal navigation channel shall be located a minimum of 6 ft. feet below the authorized project channel depth and shall be backfilled with suitable heavy material to a preconstruction bottom elevation. Coordinate with USCG & NOAA OCS to update nautical charts.

VESSEL ROUTES/ATON CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Oil & LNG	N	Vessels and oil and natural gas are not compatible due to safety exclusion zones surrounding primary energy production facilities, other than those directly associated with facility safety and operations. Geological and geophysical surveys for oil and natural gas exploration have the potential to interfere with navigation safety and vessel operations. Mariners should be alerted to geological and geophysical surveys being conducted in an area to avoid interference. Oil and natural gas siting options should be evaluated to avoid those areas frequently travel by vessels, e.g. established navigation routes or other areas heavily utilized by commercial or recreational boaters.	Physical occupation of space; safety exclusion zones;	Interference with navigation safety during G&G surveys	Coordinate with USCG and maritime stakeholders to avoid siting oil and LNG sites and infrastructure in high traffic areas or navigation channels	Clearly identify restriction zones to avoid unintentional user conflict. Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements. Coordinate with USCG & NOAA OCS to update nautical charts.
	Outfalls	Conditionally Compatible	The siting of outfalls in or near vessel routes is conditionally compatible. Potential interference with maintenance dredging activities and physical damage to the pipes for vessel or anchor impacts. To maximize compatibility, coordination between responsible agencies, stakeholder groups and permitting agencies to avoid siting outfalls in high vessel traffic areas (navigation routes/channels) unless they can be buried to the necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; compatible with coordination to avoid interference with navigation safety and dredging issues	Potential considerations during construction phase	Coordinate with USCG and maritime stakeholders to avoid siting in high traffic areas to avoid interference with navigation safety or navigation channels due to maintenance dredging issues.	Sufficiently bury pipe and extend outfall beyond maintenance dredging/navigation channel areas. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Maritime	Dredging	Y	Dredging is necessary to maintain navigable conditions in certain waterways. Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified navigation channels in order to avoid impacts to navigation safety. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Navigation channel siting options should be evaluated to avoid sand resource and gravel extraction areas and, if possible should located in areas where necessary depths may be naturally maintained to reduce the need for dredging.	Physical occupation of space; Dredging would have to be routed around ATONs prohibit use of area as sand/gravel resource	Adherence to dredging windows; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety	Coordinate with USCG to minimize or avoid impact to vessel traffic and current or proposed ATONs.	Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)

VESSEL ROUTES/ATON CONSIDERATIONS							
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	Ports	Y	Vessel routes and Aids to Navigation are compatible with ports as they support port operations and navigation safety leading to and into a port. When siting new ports, it is necessary to consider the ability to create new or utilize existing vessel routes of the size necessary to safely pilot vessels into ports. Coordinate with resource and permitting agencies to avoid or reduce impacts to any resources that may be impacted by the creation of new navigation channels, particularly if those routes will require dredging to maintain operational depths. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Vessels routes and ATONS should be appropriately sites to reduce navigational hazards entering and leaving ports operational areas.	Potential considerations during construction phase of ATONS or ports (rerouting vessels to avoid construction areas); Adherence to dredging windows; Vessel routes frequently require dredging requiring coordination to reduce interference with port operations.	When siting new ports, it is necessary to consider the ability to create new or utilize existing vessel routes of the size necessary to safely pilot vessels into ports.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Cannot dredge channels, lagoons or canals deeper than the existing controlling depth of the connecting or controlling waterways; Coordinate with maritime and port authorities and USCG to reduce the operational conflicts that may exist.
	Vessels	Y	Vessels rely on established vessels routes with properly placed aids to navigation for safe passage. When establishing a new vessel route, evaluate the vessel traffic and patterns to ensure new routes would not create additional conflicts. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Routes should avoid areas to could create hazards and interfere with navigational safety.	Adherence to dredging windows; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety. ATONs should be placed as soon as a hazard is identified or a new route is established to avoid interference with navigation safety.	ATONs should be sited based rules outline sin the USCG Aids to Navigation Manual. Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Siting routes along areas that naturally have lower sediment accretion rates requiring less maintenance dredging is preferable.	When maintenance dredging beneficial reuse of dredge materials is preferred, otherwise DNREC approval of a CDF site is required; projects shall utilize BMPs to ensure water quality standards are maintained or otherwise operation may be suspended; Adherence to dredging windows. Placement of private ATONs must adhere to the USCG rules for PATONs. Coordinate with USCG & NOAA OCS to update nautical charts.
	Anchorages	Conditionally compatible	Anchorages and vessel routes are complementary activities. While they cannot occupy the same physical space, they are necessary features for areas with heavy shipping. Siting of new anchorages should be coordinated with maritime stakeholder groups to ensure vessel routes can be established to provide access. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Avoid siting anchorages within established vessel routes. Use appropriate ATON to mark anchorages		Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Coordinate with maritime stakeholders when siting to ensure feasibility of location. Siting must follow Regulations for anchorages (33 CFR Part 100).	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Vessel Routes/ATON	Y	Aids to Navigation are intended to assist navigators in determining their position or safe course, or to warn them of dangers or obstructions to navigation and are therefore essential features along vessel routes. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.				Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

VESSEL ROUTES/ATON CONSIDERATIONS							
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	Security	Conditionally compatible	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. The establishment of vessel routes within security areas is counter to the intent of security restrictions. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.			The establishment of vessel routes within security areas is counter to the intent of security restrictions.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	Fishing Gear (pelagic) and vessels routes are conditionally compatible. Commercial and recreational fishing vessels utilize vessel routes and Aids to Navigation to guide them safely to their intended fishing destinations and Aids to Navigation are used to mark certain deployed fishing gear to warn of the presence of a navigation hazard. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that unduly impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying pelagic fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Can act as artificial reef habitat for fish, ATON creates good fishing areas; Vessel routes and ATON are necessary for navigation safety; improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that unduly impede navigation safety.		When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community.	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying pelagic fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Fishing Gear (Bottom)	Conditionally Compatible	Fishing Gear (bottom) and vessels routes are conditionally compatible. Commercial and recreational fishing vessels utilize vessel routes and Aids to Navigation to guide them safely to their intended fishing destinations and Aids to Navigation are used to mark certain deployed fishing gear to warn of the presence of a navigation hazard. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that unduly impede navigation safety. Users of bottom fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying bottom fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating	Necessary for navigation safety	Seasonal increase	When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community.	Users of bottom fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying bottom fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

VESSEL ROUTES/ATON CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.				
	Aquaculture	N	Aquaculture and vessel routes are incompatible activities due to conflicts with navigation safety, aquaculture operations and the potential for gear entanglement. Siting of new vessel routes should be coordinated with resource agencies to avoid those areas utilized by aquaculture operations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of the same space at the same time (competition); navigation safety risks	During a storm, damaged systems could create a navigational hazard*	Avoid placing aquaculture areas in vessel routes, create buffer zones; Siting of new vessel routes should be coordinated with resource agencies to avoid those areas utilized by aquaculture operations.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation; Individual leases that unreasonably restrict access or obstruct access to upland properties (channels, creeks, marinas and docks) will not be approved; some vessel traffic is allowed over lease sites located in water depths greater than 5 feet.** Minimum setback of 100 ft from marked navigation channels - individual leases often have greater setback distance from navigation channels; must be at least 30m from the edge of the approach channel to a small craft harbor, federal wharf or dock.**
	Swimming /Diving	Conditionally Compatible	Swimming and Diving in or near vessel routes is conditionally compatible and is dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security and navigation issues and therefore, swimming and diving in or near vessel routes is not advised with the exception of commercial diving associated directly with maintenance related to vessels or Aids to Navigation. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag. Persons must be certified to climb on to Aids to Navigation. Anyone engaging in swimming or diving at or near an Aid to Navigation should adhere to the US Coast Guard's rules governing these structures.	Human safety, security, navigation issues and increased potential for collision risks.	Increase activity during peak recreational season	Avoid construction in important recreational activity areas	Those engaging in swimming and diving should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

VESSEL ROUTES/ATON CONSIDERATIONS							
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	Surface Water Sports	Conditionally Compatible	Surface water sports along vessel routes are conditionally compatible and are dependent upon the type of surface water sport and presence and type of vessel activity in the vicinity. Conflicts may occur due to risks associated with human safety, security, navigation issues and increased potential for collision risks. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Necessary for navigational safety		Avoid construction in important recreational activity areas	People engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Y	Boats rely on established vessels routes with properly placed aids to navigation for safe passage. Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Necessary for navigational safety		Avoid construction in important recreational activity areas	All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Any certificate of boating safety issued in any state and approved by the National Association of State Boating Law Administrators is sufficient* Do not stop or anchor beneath bridges or in the channel. If you do, expect to be boarded by law enforcement officials; Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them.
	Hunting	Y	Boats involved in hunting activity rely on established vessels routes with properly placed aids to navigation for safe passage. Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Hunting boats rely on vessel routes and ATON for safe navigation to hunting areas	Seasonal hunting	ATON should be established in areas visible to all users; Try to avoid constructing new ATONs during active hunting	Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.
Habitat & Organisms	Air	Y	Vessel routes and Aids to Navigation have negligible impacts to Air (habitat and organisms). Avian species are known to construct nests on certain Aids to Navigation. Depending on the species, the removal of these nests may require permits and should be coordinated with state and federal agencies.	Benefit to some avian species for nesting			Depending on the species, the removal of these nests may require permits and should be coordinated with state and federal agencies.

VESSEL ROUTES/ATON CONSIDERATIONS							
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	Water	Y	Vessel routes and Aids to Navigation have negligible impacts to Water (habitat and organisms). Aids to Navigation may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality. Siting of new vessel routes should coordinated with resource agencies to avoid or minimize impacts to sensitive resource areas.		Increased water turbidity during construction	Siting of new vessel routes should coordinated with resource agencies to avoid or minimize impacts to sensitive resource areas.	The use of antifouling paint may reduce this, but may also negatively affect water quality.
	Bottom	N	Vessel routes and Aids to Navigation have the potential to impact Bottom (habitat and organisms). Aids to Navigation may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality. Anchoring of Aids to Navigation and dredging to maintain vessel routes may result in disturbance to benthic habitat, spawning and feeding grounds, and migratory pathways; displacement or destruction of benthic organisms, reduced biodiversity due to repeated disturbance. Coordination with resource agencies should occur to avoid or reduce impacts to sensitive benthic habitats through spatial or time of year restrictions.	Disturbance with anchorage of buoy markers; creation of new benthic habitat (artificial reefs)		Siting new Vessel routes/ATON should be coordinated with responsible agencies to avoid important benthic habitats	The use of antifouling paint may reduce this, but may also negatively affect water quality. Anchoring of Aids to Navigation and dredging to maintain vessel routes may result in disturbance to benthic habitat, spawning and feeding grounds, and migratory pathways; displacement or destruction of benthic organisms, reduced biodiversity due to repeated disturbance. Coordination with resource agencies should occur to avoid or reduce impacts to sensitive benthic habitats through spatial or time of year restrictions.
Resources	Cultural/Historical	Conditionally Compatible	Vessel routes and Aids to Navigation are conditionally compatible with Cultural and Historical resources. Vessel routes that require maintenance dredging may negatively impact these resources. Aids to Navigation may be used to limit vessel traffic within an area to reduce negative impacts. Coordination with the US Coast Guard, historical and cultural resource agencies and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure proper placement of aids-to-navigation.	Vessel routes that require maintenance dredging may negatively impact these resources.		Avoid known important sites, such as shipwrecks or others of cultural significance	Coordination with the US Coast Guard, historical and cultural resource agencies and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure proper placement of aids-to-navigation.
	Viewscape	Y	Vessel routes and Aids to Navigation have negligible impacts to Viewscapes. Vessels utilizing vessel routes are temporary, but the use of Aids to Navigation are generally acceptable features of a waterway.		Vessels utilizing vessel routes		

SECURITY CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally Compatible	With proper coordination, renewable energy infrastructure could be compatible in certain security restriction zones as these areas are already restricted to most other activities. Restricted zones with unexploded ordinances should be avoided and renewable energy infrastructure should not interfere with security or military activities. All nautical chart updates should be coordinated with USGS and NOAA OCS.	Physical occupation of space; conflict with wave or wind energy facilities; collision risk		Cannot be established within shipping lanes or navigational channels	Restricted zones with unexploded ordinances should be avoided and renewable energy infrastructure should not interfere with security or military activities. All nautical chart updates should be coordinated with USGS and NOAA OCS; Appropriate navigation aids must be used during and after construction; painting scheme (for wind and wave energy) must maximize safety, but minimize visual impact; armor and bury cables in areas where anchoring and scouring may occur; implement mariner education and exploration of technology upgrades to mitigate some radar issues; unauthorized vessels may not approach within 35 meters of a turbine or tie up to any part of the structure; anchoring in energy areas is prohibited; boat of any king is prohibited in all of the country's wind farms.
	Pipelines and Cables	Conditionally Compatible	With thorough coordination with the agency responsible for security area restrictions, pipelines and cables would be compatible within security zones. As they may have similar exclusion zones and limitations, siting pipelines and cables in or near security areas may be supported as it maximizes use of space that would otherwise have limited use. The responsible agency for security zones should be included in planning and construction of new pipelines and cables to minimize impacts. Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.		Vessel collisions (mostly limited during installation and repairs)	The responsible agency for security zones should be included in planning and construction of new pipelines and cables to minimize impacts.	Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation; Crews will watch for navigational hazards; construction will be coordinated with U.S. Coast Guard who will issue local notice to mariners which identifies safety precaution areas around the working boat; vessels laying cable must identify themselves and follow all rules of navigation; vessels must maintain a 1.15 mile separation from a vessel laying or repairing an undersea cable; add pipelines and cables to navigation charts.**
	Oil & LNG	Conditionally Compatible	Oil and natural gas is conditionally compatible with security areas depending on the type and extent of restrictions placed on these areas. The ability to place oil and natural gas infrastructure within security areas may be limited as there is a potential for limited access and vessel operation due to safety restrictions. Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas to ensure placement of proper aid-to navigation.	Transfer stations need to be kept away from navigation channels, but these areas can be used to transport oil and LNG; physical occupation of space; exclusion zones; increased vessel traffic			The ability to place oil and natural gas infrastructure within security areas may be limited as there is a potential for limited access and vessel operation due to safety restrictions. Restricted zones with unexploded ordinances should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas to ensure placement of proper aid-to navigation. Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements*

SECURITY CONSIDERATIONS							
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	Outfalls	Conditionally Compatible	The placement of outfalls within security areas is conditionally compatible with coordination with agencies responsible for security area restrictions. Outfalls and security zones may have similar exclusion zones and limitations that could provide an opportunity for outfalls to maximize space with limited use. Areas with unexploded ordinances or sensitive resources should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Outfalls should not be located near navigation channels			Outfalls and security zones may have similar exclusion zones and limitations that could provide an opportunity for outfalls to maximize space with limited use. Areas with unexploded ordinances or sensitive resources should be avoided. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Maritime	Dredging	Y	Dredging within security areas is conditionally compatible and is dependent upon the restrictions placed on the area. Dredging should be avoided in those areas known to contain unexploded ordinances. Dredging within security areas must be conducted with authorization and coordination with the entities responsible for establishing the restrictions.	Necessary to keep commonly used routes navigable;	Risk of collision during extraction activities**	Dredging should be avoided in those areas known to contain unexploded ordinances.	Dredging within security areas must be conducted with authorization and coordination with the entities responsible for establishing the restrictions.
	Ports	Y	Security is required to various degrees for port operation to maintain safety and protection of vessels and cargo. When siting new ports, avoid areas with potential unexploded ordnances which can create hazards to port and port operations. Due to security concerns associated with specific port or vessel activities, i.e. military, oil or LNG vessels, certain activities or operations may have temporal limitations. These conflicts can be avoided or minimized with coordination between port management, US Coast Guard, and other necessary stakeholders. .	Vessel traffic needs routes and ATON to prevent collisions and guide vessels to their destination		When siting new ports, avoid areas with potential unexploded ordnances which can create hazards to port and port operations.	Due to security concerns associated with specific port or vessel activities, i.e. military, oil or LNG vessels, certain activities or operations may have temporal limitations. These conflicts can be avoided or minimized with coordination between port management, US Coast Guard, and other necessary stakeholders.
	Vessels	Y	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. The type of security or restriction in a specific area will dictate the amount and type of vessel activity allowed within or near the area, if any.	New security or restricted areas should be sized sufficiently to provide protections without excessively interfering with other users	Specific event driven security or area restrictions could interfere with navigation or other uses in the area.		The type of security or restriction in a specific area will dictate the amount and type of vessel activity allowed within or near the area, if any.
	Anchorages	Y	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. The establishment of an anchorage is counter to the intent of these restrictions.	Vessel traffic needs routes and ATON to prevent collisions and guide vessels to their destination		Avoid siting new anchorages in heavily used areas	Vessels of less than 20 meters in a special anchorage area are not required to exhibit anchor lights or shapes required by rule 30 of the Inland Navigation Rules*
	Vessel Routes/ATON	Conditionally compatible	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. The establishment of vessel routes within security areas is counter to the intent of security restrictions. Coordination with the US Coast Guard			The establishment of vessel routes within security areas is counter to the intent of security restrictions.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

SECURITY CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.				
	Security	Y	Designating new security zones is compatible with existing zones with coordination between stakeholders to ensure new restrictions do not negatively affect the management of the existing security areas. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.			Designating new security zones is compatible with existing zones with coordination between stakeholders to ensure new restrictions do not negatively affect the management of the existing security areas.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	The use of fishing gear (pelagic) is conditionally compatible within security areas depending on the type and extent of restrictions placed on those areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.	Competition for space; improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels	Seasonal hunting	Avoid siting designated hunting areas within important fishing areas	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
	Fishing Gear (Bottom)	Conditionally Compatible	The use of fishing gear (bottom) is conditionally compatible within security areas depending on the type and extent of restrictions placed on those areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.	Exclusion zones			Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.

SECURITY CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	N	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Conducting aquaculture activities is incompatible with Security Zones as it is counter to the intent of establishing the security area.	Cannot enter security zones			
	Swimming/ Diving	Conditionally Compatible	Swimming and Diving is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, swimmers and divers should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring.	Not compatible in the same area	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Swimmers and divers should avoid using these areas, due to security risks	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring.
	Surface Water Sports	Conditionally Compatible	Surface Water Sports is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, those conducting surface water sports should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of the same space at the same time (competition)	Seasonal traffic; increased navigation safety risks		Users must adhere to all regulations and guidelines for that specific sport, including staying within designated areas, if applicable, using Aids to Navigation, maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Conditionally Compatible	Boating is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, boaters should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring.	Exclusion areas	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Avoid siting designated hunting areas within security zones	Observe and avoid all security zones; Avoid commercial port operation areas, especially those that involve military, cruise line or petroleum facilities; Observe and avoid other restricted areas near dams, power plants, etc.; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters;

SECURITY CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Hunting	Conditionally Compatible	Hunting is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, hunters should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Exclusion areas	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Avoid siting designated hunting areas within security zones	Hunters should avoid areas with security restrictions due to potential risks associated in security zones; exclusion zones to limit or restrict access; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.
Habitat & Organisms	Air	Y	Security Zones are compatible with Air (habitat or organisms). Depending on the restrictions within a zone or type of activities conducted with a security area, organisms may benefit from a decrease in disturbances.				
	Water	Y	Security Zones are conditionally compatible with Water (habitat or organisms) depending on what uses are in place within the areas and the application of regulations applied by the resource and permitting agency for those uses. Use specific BMPs should be employed to reduce impacts to marine organisms and water quality (e.g. minimizing impingement or entrainment at water intake structures, preventing spills). Depending on the restrictions within a zone or type of activities conducted with a security area, organisms may benefit from a decrease in disturbances.	Benthic organisms may benefit from exclusion zones			Use specific BMPs should be employed to reduce impacts to marine organisms and water quality (e.g. minimizing impingement or entrainment at water intake structures, preventing spills). Depending on the restrictions within a zone or type of activities conducted with a security area, organisms may benefit from a decrease in disturbances.
	Bottom	Conditionally Compatible	Security Zones are conditionally compatible with Bottom (habitat or organisms) depending on the allowable uses within the areas and the application of regulations applied by the resource and permitting agency for those uses. Use of specific BMPs should be employed to reduce impacts to marine organisms and water quality (e.g. minimizing impingement or entrainment at water intake structures, preventing spills, use of turbidity curtains when dredging around intakes). Depending on the restrictions within a zone or type of activities conducted with a security area, organisms may benefit from a decrease in disturbances.	Disturbance with anchorage of buoy markers; creation of new benthic habitat (artificial reefs)			Use of specific BMPs should be employed to reduce impacts to marine organisms and water quality (e.g. minimizing impingement or entrainment at water intake structures, preventing spills, use of turbidity curtains when dredging around intakes). Depending on the restrictions within a zone or type of activities conducted with a security area, organisms may benefit from a decrease in disturbances.

SECURITY CONSIDERATIONS							
		Compatible (Y/N)	**Conflict/Compatibility Description**	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Resources	Cultural/ Historical	Conditionally Compatible	Security Zones are conditionally compatible with Cultural and Historical resources depending on the allowable uses within the areas and the application of regulations applied by the resource and permitting agency for those uses. Coordination with historical and cultural resource agencies should be conducted to determine the presence of and evaluate potential impact to these sensitive resources. Depending on the restrictions within a zone or type of activities conducted with a security area, historical and cultural resources may benefit from a decrease in disturbances. However, depending on the restrictions to be applied within an area, access by visitors may be limited.	Lighthouses		Avoid known important sites, such as shipwrecks or others of cultural significance; Coordination with historical and cultural resource agencies should be conducted to determine the presence of and evaluate potential impact to these sensitive resources.	Conduct surveys prior to construction activities to identify significant resources; if a site cannot be avoided, an in-depth investigation must be conducted**
	Viewscape	Y	Security zones will have negligible impacts on viewscapes with potential exception of the placement of additional aids to navigation to warn of danger or restrictions.				Placement of additional aids to navigation to warn of danger or restrictions.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	Several potential conflicts exist between pelagic fishing gear and renewable energy. Pelagic fishing gear is not compatible with wave or tidal energy due to possible gear entanglement with these types of energy structures. Wind energy infrastructure could potentially be compatible with pelagic fishing gear through active coordination between permitting and resource agencies and fishermen. To reduce or avoid conflicts important fishery grounds conduct with agencies can reduce or prevent siting energy areas in and recommend time of year restrictions for construction to reduce impacts to recreational and commercial fishing activities. There is a potential for wind energy infrastructure to create unique habitat for commercially important fish species and aid the increase of important species due to fishing restrictions around energy infrastructure. An education program should also be implemented for commercial and recreational fishermen to explain infrastructure restrictions and reduce impacts to renewable energy infrastructure. All nautical chart updates should be coordinated with USGS and NOAA OCS.	Location dependent, Conditionally compatible with wind energy infrastructure, not compatible with wave or tidal. Physical occupation of space; gear entanglement, fishing exclusions; increase of commercially important species due to fishing restrictions; potential loss/gain to commercial enterprise and recreation	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordinate with NOAA NMFS, MAFC, DNREC DFW to reduce or avoid siting energy areas in important fishery grounds.	Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to renewable energy infrastructure. Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.
	Pipelines and Cables	Conditionally compatible	The use of pelagic fishing gear near pipelines and cables is conditionally compatible. Coordination with stakeholders and resource and permitting agencies must be conducted in order to reduce the potential conflict created by these activities. Spatial conflicts include the creation of exclusion zones and displacement of fishing activities during construction or maintenance. Unburied pipelines and cables can damage and interfere with fishing gear. Coordination with resource agencies should include consideration for impacts to commercial and recreational fisheries, during and post construction; impacts to vessels operators during construction and avoidance or minimization of impacts to important fishery grounds. Post construction monitoring should be implemented to determine the impacts of pipelines and cables to fish species. Fishing vessels should be prohibited from anchoring along the pipeline corridor and pipelines should be buried and armored to avoid damage from fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Unburied cables and pipelines can interfere with/ damage fishing gear; displacement of fishing activities within exclusion zone around pipeline.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordinate with NOAA NMFS, MAFC, DNREC DFW to reduce or avoid siting pipelines and cables in important fishery grounds.	Evaluate placement of pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear. Coordinate with USCG & NOAA OCS to update nautical charts.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Oil & LNG	Conditionally compatible	The use of fishing gear (pelagic) and oil and natural gas is conditionally compatible. Pelagic fishing gear would not conflict with the primary intention of oil and natural gas, but improperly deployed or derelict fishing gear has the potential to create obstacles or entanglement hazards that impede navigation safety to vessels directly associated with oil and natural gas production or transfer. Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; interference with navigation safety; gear entanglement; exclusion zones; creation of new habitat type (platforms/pipes)	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment; temporary displacement of target fish species due to survey activities;	Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized.	Avoid conducting surveys during migration and spawning seasons; Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements. Evaluate placement of associated pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear; Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Outfalls	Conditionally Compatible	The use of pelagic fishing gear near outfalls is conditionally compatible. Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location. Potential conflicts include creation of exclusion zones and displacement of fishing activities during construction and maintenance. To avoid damage or undermining of the outfall infrastructure, fishing vessels should be prohibited from anchoring near outfalls unless it has been buried to necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; gear entanglement, interference with navigation safety, anchoring near an ocean outfall could damage or undermine the infrastructure.	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location.	Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to outfall infrastructure. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Anchoring in areas with unburied pipeline is prohibited. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards.
Maritime	Dredging	Conditionally Compatible	Dredging and pelagic fishing activities are conditionally compatible. Dredging may negatively impact essential fish habitat due to sediment resuspension and settlement or direct disturbance, interfere with the reproductive success of important commercial and recreational species through the disruption of spawning and migratory areas, affect to the suitability of commercial and recreational fishing ground habitats. Coordination with resource and permitting agencies should occur to prevent or reduce impacts to areas sensitive to fisheries. Conducting fishing operations near or adjacent to dredging operations may cause navigation safety issues and gear entanglement, damage, or loss; therefore a minimum safety buffer should be adhered.	Physical occupation of space; Fishing activities should be prohibited during active dredging operations; sediment resuspension, settlement or direct disturbance interfere with the reproductive success of important commercial and recreational species	Adherence to dredging windows to avoid impacts to spawning, feeding and migratory areas; Reroute traffic around active dredge sites to avoid interference with navigation safety, minimize dredging activities during periods of high recreational or commercial activities.	Evaluate data to avoid sensitive benthic habitat (e.g. important breeding, feeding, and migratory areas). Select borrow sites that have been previously used for sand and gravel mining to minimize reoccurring fishery impacts related to direct disturbance; utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts;	Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted, coordinate with stakeholders to reduce impacts to the fishery industry, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc); Conducting fishing operations near or adjacent to dredging operations may cause navigation safety issues and gear entanglement, damage, or loss; therefore a minimum safety buffer should be adhered.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Ports	N	Fishing with pelagic fishing gear is incompatible within a port due to the conflicts with navigation safety and port operations and the potential for gear entanglement.	Avoid siting ports in or near important spawning or nursery grounds for commercial, recreational or RTE species.	Hazardous weather conditions can result in the accumulation of derelict fishing gear. Derelict fishing gear removal plans to ensure timely removal of these hazards.	Establish exclusion zones for the use of commercial or recreational fishing gear.	Coordinate with fishing industry stakeholders and resource agencies to identify and avoid impacting areas of significant importance to fisheries. Address the derelict fishing gear through program like the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through program like the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish fishermen led derelict gear recovery programs similar to those developed in other states.
	Vessels	Conditionally Compatible	Fishing Gear (pelagic) and vessels are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes/ports). Safe operating distance should be maintained between vessels and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program.	Higher vessel traffic on the bay and river, decreased fish habitat, decreased recreational opportunity; derelict fishing gear can create a navigational hazard to vessels through a tangled propeller or clogged intake; Physical occupation of space; Safe operating distance should be maintained between vessels and boats/vessels operating with deployed fishing gear (trawls, nets). Safe operating distance should be maintained between vessels and deployed gear (hook and line). Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes)	Fishing gear should avoid being deployed at night in areas which would result in interference with navigation with proper lighting or beacon aids.	Coordinate with resource agency and commercial and recreational fishing stakeholders reduce or avoid siting vessel routes in important fishery grounds. Establish exclusion zones for the use of commercial or recreational fishing gear.	Coordinate with fishing industry stakeholders and resource agencies to identify and avoid impacting areas of significant importance to fisheries. Address the derelict fishing gear through program like the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through program like the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish a fishermen led derelict gear recovery program similar to those developed in other states; Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Anchorages	Conditionally compatible	Pelagic fishing gear use and anchorages are conditionally compatible. Use of pelagic fishing gear within an anchorage would not conflict with primary use of the anchorage is dependent upon the presence and type of vessels within the anchorage. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist. Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety		Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized.	If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish fishermen led derelict gear recovery programs (similar to Northern California programs). Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Vessel Routes/ATON	Conditionally Compatible	Fishing Gear (pelagic) and vessels routes are conditionally compatible. Commercial and recreational fishing vessels utilize vessel routes and Aids to Navigation to guide them safely to their intended fishing destinations and Aids to Navigation are used to mark certain deployed fishing gear to warn of the presence of a navigation hazard. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that unduly impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying pelagic fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Can act as artificial reef habitat for fish, ATON creates good fishing areas; Vessel routes and ATON are necessary for navigation safety; improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that unduly impede navigation safety.		When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community.	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying pelagic fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Security	Conditionally Compatible	The use of fishing gear (pelagic) is conditionally compatible within security areas depending on the type and extent of restrictions placed on those areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.	Gear type dependent; gear entanglement or damage; risk to navigation and human safety			Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	The use of fishing gear (pelagic) near other deployed pelagic fishing gear is conditionally compatible depending on the types of gear in use. Potential conflicts that may arise include gear entanglement or damage, risk to navigation safety and risk to human safety. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas could reduce risks while increasing the use potential of the area.	Gear type dependent; gear entanglement or damage; risk to navigation and human safety			Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas could reduce risks while increasing the use potential of the area.
	Fishing Gear (Bottom)	Conditionally Compatible	The use of fishing gear (bottom) near other deployed bottom fishing gear is conditionally compatible depending on the types of gear in use. Potential conflicts that may arise include gear entanglement or damage, risk to navigation safety and risk to human safety. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas and use of proper marker to indicate the presence/location of fishing gear could reduce potential risks while increasing the use potential of the area.	Physical occupation of space; gear entanglement or damage; risk to navigation and human safety			Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas and use of proper marker to indicate the presence/location of fishing gear could reduce potential risks while increasing the use potential of the area.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	N	The use of fishing gear (pelagic) and Aquaculture are incompatible activities due to conflicts with navigation safety and the potential for gear entanglement or damage. Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize these conflicts. Additionally, when designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for pelagic species. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Gear entanglement, presence of other commercial species, Exclusion zones created by aquaculture; dilution of wild genetic stock*		Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize conflicts; When designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for benthic species.	Commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity; Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Swimming /Diving	N	Swimming and Diving is not a compatible activity in areas of where Fishing Gear (pelagic) is actively in use. The conflicts are risks to human and navigation safety. People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Interference with scuba divers (entanglement)			People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Surface Water Sports	N	Surface Water Sports are not compatible activities in areas of where Fishing Gear (pelagic) is actively in use and should be avoided due to interference with navigational safety, human safety, potential collision risks and entanglement, either with active or derelict gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Can interfere with recreational users; entanglement from derelict fishing gear;	Increase during popular fishing seasons		People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**
	Boating	Conditionally Compatible	Fishing Gear (pelagic) and boating are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Gear that floats or suspends in the water column will conflict with boating activities, Physical occupation of the same space at the same time (competition)	Seasonal traffic and fishing	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes)	Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Fishing Gear (Pelagic)	Conditionally Compatible	Fishing Gear (pelagic) and hunting are conditionally compatible although conducting these activities in the same time and place should be avoided due to increased risk to human safety and navigation safety. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Competition for space; improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels	Seasonal hunting	Avoid siting designated hunting areas within important fishing areas	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
Habitat & Organisms	Air	Y	Fishing Gear (pelagic) impacts to Air (habitat and organisms) is minimal dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Vessel/boat activity and abundance may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Derelict fishing gear poses threats of entanglement to avian species*	Potential increased impacts during seasonal migrations		Vessel/boat activity and abundance may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear create a community-based marine program to remove marine debris

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Water	Conditionally Compatible	Fishing Gear (pelagic) impacts to Water (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Vessel/boat activity and gear deployment may result in increased water pollution resulting from spills and marine debris including derelict fishing gear which can create entanglement hazards for marine organisms. Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Entanglement and unwanted capture of marine species; derelict fishing gear can aid in the transport of invasive species*	Potential increased impacts during seasonal migrations		Vessel/boat operators should employ best management practices to limit/reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear or by a resource agency through a derelict gear clean-up program. To minimize impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid using bottom fishing gear in sensitive resource areas. Those engaging in activities must adhere to all regulations governing those activities, including boat and navigation safety, maintaining awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear create a community-based marine program to remove marine debris.
	Bottom	Y	Fishing Gear (pelagic) impacts to Bottom (habitat and organisms) are minimal and dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Vessel/boat activity may result in bottom impacts as a result of anchoring, marine debris including derelict fishing gear which can smother benthic habitat and organisms. Vessel/boat operators should employ best management practices to limit or reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. To minimize these impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid using bottom fishing gear in sensitive resource areas. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations	Derelict fishing gear can lead to degradation to bottom habitat (i.e. smother habitat during storms); capture of unwanted marine species; derelict fishing gear can aid in the transport of invasive species*			Vessel/boat operators should employ best management practices to limit/reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear or by a resource agency through a derelict gear clean-up program. To minimize impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid using bottom fishing gear in sensitive resource areas. Those engaging in activities must adhere to all regulations governing those activities, including boat and navigation safety, maintaining awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear create a community-based marine program to remove marine debris.

FISHING GEAR (PELAGIC) CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**	Conflict/Compatibility Description	**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Resources	Cultural/Historical	Conditionally compatible	Fishing Gear (pelagic) is conditionally compatible with Cultural and Historic resources. The use of pelagic fishing gear may benefit from Cultural and Historic resource if they are structural in nature which can create preferred habitat for pelagic species. Depending on the location and depth of the cultural or historic resource, vessel deploying fishing gear may be able to pass over without impacts. However, these locations should be identified to restrict anchoring and use of certain gear types to prevent physical damage from entanglement or collision. Potential effects may occur on shorelines from vessel/boat wakes. Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts.	Direct impacts to surface resources (i.e. fishing from historic resources); degradation of underwater resources from derelict fishing gear		Consult with state and/or federal historical departments before the removal of gear in or near the vicinity of important historical or cultural resources to prevent additional impacts to the integrity of the resource.	Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts.
	Viewscape	Conditionally Compatible	Fishing Gear (pelagic) impact on viewscape is minimal. Visual impacts are generally temporary resulting from the presence of vessel or fishing markers, however, derelict gear washed ashore may create more unsightly impacts. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program.	Derelict fishing gear can create an eyesore and could potentially cause economic loss to popular tourist locations*			Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	N	Renewable energy infrastructure and bottom fishing gear are not compatible in the same location. Conflicts include gear entanglement, fishing exclusion zones and impacts to the energy infrastructure. Coordination between FERC, NOAA NMFS, MAFMC, DNREC DFW and fishermen can reduce impacts with siting energy areas in important fishery grounds and can establish recommend time of year restrictions for construction to reduce impacts to recreational and commercial fishing activities. An education program should also be implemented for commercial and recreational fishermen to explain infrastructure restrictions and reduce impacts to renewable energy infrastructure. All nautical chart updates should be coordinated with USGS and NOAA OCS.	Physical occupation of space; gear entanglement, fishing exclusion zones, impacts to infrastructure.	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordination between NOAA NMFS, MAFC, DNREC DFW and fishermen can reduce or avoid siting energy areas in important fishery grounds and recommend time of year restrictions for construction to reduce impacts to recreational and commercial fishing activities	Trawling, bottom fishing and anchoring is not allowed within energy areas; Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to renewable energy infrastructure. Coordinate with federal authorities to determine vessel type restrictions. An education program should also be implemented for commercial and recreational fishermen to explain infrastructure restrictions and reduce impacts to renewable energy infrastructure. All nautical chart updates should be coordinated with USGS and NOAA OCS.
	Pipelines and Cables	Conditionally compatible	The use of pelagic fishing gear near pipelines and cables is conditionally compatible. Coordination with stakeholders and resource and permitting agencies must be conducted in order to reduce the potential conflict created by these activities. Spatial conflicts include the creation of exclusion zones and displacement of fishing activities during construction or maintenance. Unburied pipelines and cables can damage and interfere with fishing gear. Coordination with resource agencies should include consideration for impacts to commercial and recreational fisheries, during and post construction; impacts to vessels operators during construction and avoidance or minimization of impacts to important fishery grounds. Post construction monitoring should be implemented to determine the impacts of pipelines and cables to fish species. Fishing vessels should be prohibited from anchoring along the pipeline corridor and pipelines should be buried and armored to avoid damage from fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Potential physical occupation of space; buried cables and pipelines should not interfere with bottom fishing activities; unsubmerged cables can interfere with fishing gear; gear entanglement; displacement of fishing activities within exclusion zone around pipeline.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment	Coordinate with NOAA NMFS, MAFC, DNREC DFW to reduce or avoid siting pipelines and cables in important fishery grounds; Coordination with resource agencies should include consideration for impacts to commercial and recreational fisheries, during and post construction; impacts to vessels operators during construction and avoidance or minimization of impacts to important fishery grounds.	Evaluate placement of pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Oil & LNG	Conditionally compatible	The use of fishing gear (bottom) and oil and natural gas is conditionally compatible depending on the type of gear utilized within an area. Bottom fishing gear would not conflict with the primary intention of oil and natural gas, but has the potential to cause direct damage to supporting infrastructure if that infrastructure were not properly protected. Improperly deployed or derelict fishing gear has the potential to create obstacles or entanglement hazards that impede navigation safety to vessels directly associated with oil and natural gas production or transfer. Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; interference with navigation safety; gear entanglement; exclusion zones; creation of new habitat type (platforms/pipes); buried pipelines and bottom fishing should be compatible.	Potential considerations during construction phase; Displacement of vessel activities during construction; coordinate with USCG to notify vessel operators of precautions to used when operating near installation equipment; temporary displacement of target fish species due to survey activities;	Siting of oil and natural gas infrastructure should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized.	Avoid conducting surveys during migration and spawning seasons; Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended avoidance requirements. Evaluate placement of associated pipes (Buried vs unburied) and consider impacts to fisheries & fisheries habitats; Post construction monitoring to determine impact of pipelines on impacts of fish; coordinate with stakeholders to reduce impacts to commercial and recreational fisheries including for considerations for security needs, prohibit vessels from anchoring along pipeline corridor; bury and armor pipes to avoid damage from anchors or fishing gear. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Outfalls	Conditionally Compatible	The use of bottom fishing gear near outfalls is conditionally compatible. Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location. Potential conflicts include creation of exclusion zones and displacement of fishing activities during construction and maintenance. To avoid damage or undermining of the outfall infrastructure, fishing vessels should be prohibited from anchoring or launching bottom fishing gear near outfalls. If a proposed outfall can be buried, construction must follow necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of space; gear entanglement, interference with navigation safety, anchoring near an ocean outfall could damage or undermine the infrastructure; displacement of fish species	Potential considerations during construction phase; time of year restrictions to reduce impacts to recreational and commercial fishing activities.	Coordination with responsible agencies and stakeholder groups is necessary to reduce potential conflicts created by these activities in the same location.	Trawling, bottom fishing and anchoring is not allowed in area with unburied outfall pipes or point of discharge to prevent damage to infrastructure and gear entanglement. Maintain open dialogue with fishermen (during planning construction and operation) to determine safe operating practices within the site and minimize conflicts; implement education program for commercial and recreational fisherman to reduce impacts to infrastructure and gear. To avoid damage or undermining of the outfall infrastructure, fishing vessels should be prohibited from anchoring or launching bottom fishing gear near outfalls. If a proposed outfall can be buried, construction must follow necessary depths required by permitting agencies. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. Anchoring in areas with unburied pipeline is prohibited. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Maritime	Dredging	Conditionally Compatible	Dredging and pelagic fishing activities are conditionally compatible. Dredging may negatively impact essential fish habitat due to sediment resuspension and settlement or direct disturbance, interfere with the reproductive success of important commercial and recreational species through the disruption of spawning and migratory areas, affect to the suitability of commercial and recreational fishing ground habitats. Coordination with resource and permitting agencies should occur to prevent or reduce impacts to areas sensitive to fisheries. Conducting fishing operations near or adjacent to dredging operations may cause navigation safety issues and gear entanglement, damage, or loss; therefore a minimum safety buffer should be adhered.	Physical occupation of space; Fishing activities should be prohibited during active dredging operations	Adherence to dredging windows to avoid impacts to spawning, feeding and migratory areas; Traffic would need to be routed around active dredge sites to avoid interference with navigation safety, minimize dredging activities during periods of high recreational or commercial activities.	Evaluate data to avoid sensitive benthic habitat (e.g. important breeding, feeding, and migratory areas). Select borrow sites that have been previously used for sand and gravel mining to minimize reoccurring fishery impacts related to direct disturbance; utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts; Coordination with resource and permitting agencies should occur to prevent or reduce impacts to areas sensitive to fisheries.	Coordinate with the coast guard to avoid interference with navigation safety and issue local notice to mariners identifying areas in which dredging will be conducted, coordinate with stakeholders to reduce impacts to the fishery industry, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc)
	Ports	N	Fishing with bottom fishing gear is incompatible within a port due to the conflicts with navigation safety and port operations and the potential for gear entanglement.	Avoid siting ports in or near important spawning or nursery grounds for commercial, recreational or RTE species; Derelict fishing gear can create a navigational hazard to vessels through a tangled propeller or clogged intake; commercial fishing does not occur in ports	Hazardous weather conditions can result in the accumulation of derelict fishing gear. Derelict fishing gear removal plans to ensure timely removal of these hazards.	Establish exclusion zones for the use of commercial or recreational fishing gear.	Coordinate with fishing industry stakeholders and resource agencies to identify and avoid impacting areas of significant importance to fisheries. Address the derelict fishing gear through program like the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through program like the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear. Establish fishermen led derelict gear recovery programs similar to those developed in other states.
	Vessels	Conditionally Compatible	Fishing Gear (bottom) and vessels are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes/ports). Safe operating distance should be maintained between vessels and boats/vessels operating with deployed, deploying or retrieving fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or adrift or by a resource agency through a derelict gear clean-up program.	Physical occupation of space; Safe operating distance should be maintained between vessels and boats/vessels operating with deployed fishing gear (trawls, nets). Safe operating distance should be maintained between vessels and deployed gear (hook and line). Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes)	Fishing gear should avoid being deployed at night in areas which would result in interference with navigation with proper lighting or other aids.	Consider various levels of government and other stakeholders are considered in the policy process. Coordinate with resource agency and commercial and recreational fishing stakeholders reduce or avoid siting vessel routes in important fishery grounds.	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high vessel traffic areas (navigation routes/ports). Safe operating distance should be maintained between vessels and boats/vessels operating with deployed, deploying or retrieving fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or adrift or by a resource agency through a derelict gear clean-up program.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Anchorages	Conditionally compatible	Bottom fishing gear use and anchorages are conditionally compatible. Use of bottom fishing gear within an anchorage would not conflict with primary use of the anchorage is dependent upon the presence and type of vessels within the anchorage. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist. Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Derelict fishing gear can create a navigational hazard to vessels through a tangled propeller or clogged intake*		Coordinate with resource agency to identify and avoid sensitive resource areas that would be negatively impacted by repeated benthic disturbance. Coordinate with resource agency and fishery stakeholder groups to avoid designating anchorages in areas of high recreational or commercial fishing use.	If proper management practices and/or boating regulations are applied (e.g. maintaining minimal distances from anchored vessels and retrieving all gear from area once activity is complete), activities may co-exist. Siting of new anchorages should be coordinated with resource agencies to ensure impacts to areas important to or heavily utilized by commercial and recreational fishing communities may be avoided or minimized. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Vessel Routes/ATON	Conditionally Compatible	Fishing Gear (pelagic) and vessels routes are conditionally compatible. Commercial and recreational fishing vessels utilize vessel routes and Aids to Navigation to guide them safely to their intended fishing destinations and Aids to Navigation are used to mark certain deployed fishing gear to warn of the presence of a navigation hazard. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that unduly impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying pelagic fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Necessary for navigation safety	Seasonal increase	When determining new vessel routes, evaluate available data to avoid or minimize conflicts in areas heavily utilized the recreational and commercial fishing community.	Users of bottom fishing gear must follow all permitting and safety agency regulations. Users should avoid deploying bottom fishing gear in high vessel traffic areas (navigation routes/channels). Safe operating distance should be maintained between fishing vessels with deployed gear and boats/vessels operating nearby. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Security	Conditionally compatible	The use of fishing gear (bottom) is conditionally compatible within security areas depending on the type and extent of restrictions placed on those areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.	Exclusion zones			Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. Restricted zones with unexploded ordinances should be avoided. Anyone conducting fishing activities should follow navigation safety rules and guidelines.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	The use of fishing gear (bottom) near other deployed bottom fishing gear is conditionally compatible depending on the types of gear in use. Potential conflicts that may arise include gear entanglement or damage, risk to navigation safety and risk to human safety. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas and use of proper marker to indicate the presence/location of fishing gear could reduce potential risks while increasing the use potential of the area.	Physical occupation of space; gear entanglement or damage; risk to navigation and human safety			Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas and use of proper marker to indicate the presence/location of fishing gear could reduce potential risks while increasing the use potential of the area.
	Fishing Gear (Bottom)	N	The use of fishing gear (bottom) near other deployed bottom fishing gear is incompatible due to potential gear entanglement or damage, and risk to navigation safety. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas could reduce risks while increasing the use potential of the area.	Competition for the same space		Encourage the use of biodegradable escape mechanisms	Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination within active fishing areas could reduce risks while increasing the use potential of the area: A turtle by-catch device is required to be attached in each funnel entrance of a recreational crab pot to reduce the possibility of diamondback terrapins entering and drowning. Failure to tend and remove crabs from a crab pot in the tidal waters of this State at least 72 hours after said pot is tagged by the Department shall constitute abandonment of said crab pot.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	N	The use of fishing gear (bottom) and Aquaculture are incompatible activities due to conflicts with navigation safety and the potential for gear entanglement or damage. Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize these conflicts. Additionally, when designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for benthic species. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Gear entanglement, presence of other commercial species, Exclusion zones created by aquaculture; dilution of wild genetic stock*		Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize conflicts; When designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for benthic species.	Commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity; Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Swimming /Diving	Conditionally Compatible	Swimming and Diving are conditionally compatible activities in areas of where Fishing Gear (bottom) are deployed depending on the type of gear in use. The conflicts are risks to human and navigation safety. People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. To reduce conflicts among these activities, swimmers and divers should avoid areas where active fishing is occurring with gear types such as nets or dredges and should not interfere with passive gear such as fishing pots. Additionally bottom gear should avoid deploying gear in those areas heavily used for recreational activities.	Interference with scuba divers (entanglement)	Increase activity during peak recreational season	To reduce conflicts among these activities, swimmers and divers should avoid areas where active fishing is occurring with gear types such as nets or dredges and should not interfere with passive gear such as fishing pots.	People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Additionally bottom gear should avoid deploying gear in those areas heavily used for recreational activities.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Surface Water Sports	Conditionally compatible	Surface Water Sports are conditionally compatible activities in areas of where Fishing Gear (bottom) is deployed depending on the type of gear in use. The conflicts are risks to human and navigation safety. People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. To reduce conflicts among these activities, those engaging surface water sports should avoid areas where active fishing is occurring with gear types such as nets or dredges and should avoid passive gear such as fishing pots. Additionally bottom gear should avoid deploying in those areas heavily used for recreational activities.	Can interfere with recreational users; entanglement from derelict fishing gear;	Increase during popular fishing seasons	Those engaging surface water sports should avoid areas where active fishing is occurring with gear types such as nets or dredges and should avoid passive gear such as fishing pots. Additionally bottom gear should avoid deploying in those areas heavily used for recreational activities.	People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
	Boating	Conditionally Compatible	Fishing Gear (bottom) and boating are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Gear entanglement with boat engines; Physical occupation of the same space at the same time (competition)	Seasonal traffic		Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Hunting	Conditionally Compatible	Fishing Gear (bottom) and hunting are conditionally compatible although conducting these activities in the same time and place should be avoided due to increased risk to human safety and navigation safety. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels. Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Competition for space; gear (set or derelict) can create obstacles or entanglement hazards that would impede navigation safety; exclusion zones; impacts from hunting	Seasonal hunting	Avoid siting designated hunting areas within important fishing areas	Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes); Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear; Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity; Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
Habitat & Organisms	Air	Y	Fishing Gear (bottom) impacts to Air (habitat and organisms) is minimal dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Vessel/boat activity and abundance may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Derelict fishing gear poses threats of entanglement to avian species*			Address the derelict fishing gear issue through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**create a community-based marine program to remove marine debris***; Vessel/boat activity and abundance may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Water	Conditionally Compatible	Fishing Gear (Bottom) impacts to Water (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Vessel/boat activity and gear deployment may result in increased water pollution resulting from spills, increased turbidity, and marine debris including derelict fishing gear which can create entanglement hazards for marine organisms. Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded or minimalized during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Entanglement and unwanted capture of marine species; derelict fishing gear can aid in the transport of invasive species*	Seasonal restrictions		Vessel/boat operators should employ best management practices to limit or reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. To minimize these impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid using bottom fishing gear in sensitive resource areas. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity; Address the derelict fishing gear issue through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**create a community-based marine program to remove marine debris***a turtle by-catch device is required to be attached in each funnel entrance of a recreational crab pot to reduce the possibility of diamondback terrapins entering and drowning.
	Bottom	Conditionally compatible	Fishing Gear (Bottom) impacts to Bottom (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Boat and bottom fishing gear impacts to the benthic habitat may result from direct impacts from specific gear type including disturbance or destruction of the habitat, anchoring, marine debris including derelict fishing gear which can smother benthic habitat and organisms. Vessel/boat operators should employ best management practices to limit or reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. To minimize these impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid using bottom fishing gear in sensitive resource	Derelict fishing gear can lead to degradation to bottom habitat (i.e. smother habitat during storms); capture of unwanted marine species; derelict fishing gear can aid in the transport of invasive species*		Encourage the use of biodegradable escape mechanisms	Vessel/boat operators should employ best management practices to limit or reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. To minimize these impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid using bottom fishing gear in sensitive resource areas. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity; Address the derelict fishing gear issue through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict

FISHING GEAR (BOTTOM) CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			areas. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.				and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**create a community-based marine program to remove marine debris***a turtle by-catch device is required to be attached in each funnel entrance of a recreational crab pot to reduce the possibility of diamondback terrapins entering and drowning
Resources	Cultural/Historical	Conditionally compatible	Fishing Gear (bottom) is conditionally compatible with Cultural and Historic resources depending on the gear type used. Cultural and Historic resources locations should be identified to restrict anchoring and use of certain gear types to prevent physical damage or entanglement from derelict gear. Potential effects may occur on shorelines from vessel/boat wakes. Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts.	Disturbance to prehistorical cultural resources; degradation of underwater resources from derelict fishing gear; dependent on type of gear used		Consult with state and/or federal historical departments before the removal of gear in or near the vicinity of important historical or cultural resources to prevent additional impacts to the integrity of the resource.	Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts.
	Viewscape	Conditionally Compatible	Fishing Gear (bottom) impact on viewscape is minimal. Visual impacts are generally temporary resulting from the presence of vessel or fishing markers, however, derelict gear washed ashore may create more unsightly impacts. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program.	Derelict fishing gear can create an eyesore and could potentially cause economic loss to popular tourist locations*			Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**create a community-based marine program to remove marine debris***

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	With proper coordination, there is potential to site renewable energy areas depending on the type of aquaculture production and the type of energy infrastructure proposed. To accommodate duel use of the area, early coordination with FERC, NOAA NMFS, MAFC, DNREC DFW is strongly recommended. All nautical chart updates should be coordinated with USGS and NOAA OCS to include both uses within the same area.	Potential to accommodate aquaculture activities around wind energy areas	Potential considerations during construction phase	Coordinate with NOAA NMFS, MAFC, DNREC DFW to promote duel use of areas for both activities.	All nautical chart updates should be coordinated with USGS and NOAA OCS to include both uses within the same area.
	Pipelines and Cables	Conditionally compatible	Aquaculture and pipelines and cables are conditionally compatible activities. Both aquaculture and pipelines and cables have exclusion zones and limitations, which may preclude siting in same location. Close proximity of these two uses risks potential impacts to aquaculture if emergency or unscheduled maintenance to pipelines and cables is required. The potential risk of contamination of aquaculture sites in close proximity to damaged pipelines and cables should be evaluated. Coordination between stakeholders and responsible agencies is necessary to determine placement of pipelines and cables to minimize disturbance to siting, construction and maintenance operations. Aquaculture gear type must be compatible for use near pipelines and cables to reduce potential damage to the infrastructure. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of the same space, both activities have exclusion zone limitations; water quality impacts	Coordination is necessary during construction phase;	Coordinate with stakeholders to minimize disturbance of each operation type for siting, construction, and maintenance. Placement of aquaculture sites in close proximity to pipelines and cables risk impacts if emergency/unscheduled maintenance is required. Evaluate potential risk of contamination to aquaculture facility if pipeline damaged.	Aquaculture facility equipment and gear type must be compatible for use near pipelines and cables to reduce potential damage to infrastructure.
	Oil & LNG	Conditionally compatible	Aquaculture and oil and natural gas are conditionally compatible dependent upon the location of both types of infrastructure. Security restrictions around platforms may preclude aquaculture activities from occurring in immediate vicinity. Additionally, the risk of oil or natural gas leaks and its potential impact on aquaculture production may be too great. To maximize compatibility, coordination between resource agencies should ensure that aquaculture equipment is compatible for use near pipelines and platforms to reduce potential damage to oil and natural gas infrastructure. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of the same space, both activities have exclusion zone limitations; opportunities to co-locate with offshore uses.	Coordination is necessary during construction phase;	Coordinate with stakeholders to minimize disturbance of each operation type for siting, construction, and maintenance. Placement of aquaculture sites in close proximity oil/LNG risk impacts if emergency/unscheduled maintenance is required. Evaluate potential risk of contamination to aquaculture facility if pipeline damaged.	Consider long term planning options including the use of platforms for aquaculture operations at the end of their "useful" life, instead of abandonment. Aquaculture facility equipment and gear type must be compatible for use near pipelines and platforms to reduce potential damage to infrastructure. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation;

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Outfalls	N	Outfalls and aquaculture facilities are not compatible in the same location due to exclusion zones and limitations of these activities. Outfalls can potentially impact water quality that is not conducive for aquaculture production if these sites are located within close proximity of one another. Coordination between responsible agencies is necessary to avoid siting aquaculture and outfalls in the same location.	Potential for water quality degradation possible negatively affecting production. exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs ,Pharmaceuticals and Personal Care Products (PPCPs)		Due to potential for exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, pharmaceuticals, aquaculture facilities should not be sited in outfall discharge areas; Coordination between responsible agencies is necessary to avoid siting aquaculture and outfalls in the same location.	Assess the effects of discharge stormwater or waste water on the marine environment; evaluate potential for standard and innovative BMPs to manage environmental impacts to marine waters. Coordinate with USCG & NOAA OCS to update nautical charts. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards.
Maritime	Dredging	N	Dredging and aquaculture are not compatible as the placement or operation of necessary equipment for one activity will interfere with the placement or operation of necessary equipment for other.	Cannot occupy the same space at the same time	If aquaculture operations were to temporarily halt, depending on the infrastructure, dredging may be feasible		
	Ports	N	Aquaculture and ports are incompatible activities due to conflicts with navigation safety and port operations and the potential for gear entanglement. Additionally, the water within a port has a higher potential for low quality due to the shear amount of vessel traffic and would not be conducive to aquaculture operations.	Vessel traffic, collision risks, impacts to shellfish; physical occupation of space	Water quality impacts		Individual leases that unreasonably restrict access or obstruct access to upland properties (channels, creeks, marinas and docks) will not be approved; some vessel traffic is allowed over lease sites located in water depths greater than 5 feet.
	Vessels	N	The operation of vessels is incompatible with aquaculture due to conflicts with navigation safety and port operations and the potential for gear entanglement. Additionally, vessels have the potential affect water quality which could negatively impact an aquaculture operation. When siting, aquaculture facilities should avoid high vessel traffic areas (navigation routes/ports). Vessels operators should maintain as safe buffer between vessels and aquaculture facilities. Aquaculture facilities should be clearly marked using aids-to-navigation to reduce conflict.	Physical occupation of the same space at the same time (competition); impacts to species in aquaculture facilities	Water quality impacts	When siting, aquaculture facilities should avoid high vessel traffic areas (navigation routes/ports)	Vessels operators should maintain as safe buffer between vessels and aquaculture facilities. Aquaculture facilities should be clearly marked using aids-to-navigation to reduce conflict.
	Anchorages	N	Aquaculture and anchorages are incompatible activities due to conflicts with navigation safety and anchorage operations and the potential for gear entanglement. Siting of new anchorages should be coordinated with resource agencies to avoid those areas utilized by aquaculture operations.	Physical occupation of the same space at the same time (competition)	During a storm, damaged systems could create a navigational hazard*	The siting of new aquaculture facilities should be coordinated to reduce interfering with existing anchorages.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.; Some vessel traffic is allowed over lease sites located in water depths greater than 5 feet.

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessel Routes/ATON	N	Aquaculture and vessel routes are incompatible activities due to conflicts with navigation safety, aquaculture operations and the potential for gear entanglement. Siting of new vessel routes should be coordinated with resource agencies to avoid those areas utilized by aquaculture operations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Physical occupation of the same space at the same time (competition); navigation safety risks	During a storm, damaged systems could create a navigational hazard*	Avoid placing aquaculture areas in vessel routes, create buffer zones; Siting of new vessel routes should be coordinated with resource agencies to avoid those areas utilized by aquaculture operations.	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation; Individual leases that unreasonably restrict access or obstruct access to upland properties (channels, creeks, marinas and docks) will not be approved; some vessel traffic is allowed over lease sites located in water depths greater than 5 feet. Minimum setback of 100 ft from marked navigation channels - individual leases often have greater setback distance from navigation channels; must be at least 30m from the edge of the approach channel to a small craft harbor, federal wharf or dock.
	Security	N	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Conducting aquaculture activities is incompatible with Security Zones as it is counter to the intent of establishing the security area.	Cannot enter security zones			
Fishing & Recreation	Fishing Gear (Pelagic)	N	The use of fishing gear (pelagic) and Aquaculture are incompatible activities due to conflicts with navigation safety and the potential for gear entanglement or damage. Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize these conflicts. Additionally, when designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for pelagic species. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Gear entanglement, presence of other commercial species, Exclusion zones created by aquaculture; dilution of wild genetic stock*		Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize conflicts; When designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for benthic species.	Commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity; Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Fishing Gear (Bottom)	N	The use of fishing gear (bottom) and Aquaculture are incompatible activities due to conflicts with navigation safety and the potential for gear entanglement or damage. Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize these conflicts. Additionally, when designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for benthic species. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Gear entanglement, presence of other commercial species, Exclusion zones created by aquaculture; dilution of wild genetic stock*		Resource and enforcement agencies should evaluate the potential implementation of buffers around aquaculture facilities to minimize conflicts; When designating new aquaculture site resource agencies should evaluate areas to avoid those heavily used by the fishing community or that are important breeding, feeding or nursery grounds for benthic species.	Commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity; Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Aquaculture	Conditionally Compatible	Conducting aquaculture activities at or near existing aquaculture facilities is dependent upon several factors including type of equipment used and time of year. If equipment types are compatible, coordination among stakeholders could be conducted to reduce conflict and maximize potential use of the space. Variations in the operation periods throughout the year may also allow for increased utilization of the designated aquaculture areas with coordination. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Proximity to other future aquaculture locations,		If equipment types are compatible, coordination among stakeholders could be conducted to reduce conflict and maximize potential use of the space; Project must be 125m from all other wild shellfish beds and commercial shellfish growing operations; spacing between farm sites to be three kilometers or in accordance with local area plan or Coastal Zone Management Plan (areas with the same company may only require one kilometer); must be three kilometers away from any existing finfish aquaculture site or in accordance with a local area plan or Coastal Zone Management Plan.	Variations in the operation periods throughout the year may also allow for increased utilization of the designated aquaculture areas with coordination. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Swimming /Diving	N	Swimming and diving are incompatible with Aquaculture facilities due to conflict with human safety and operation security, with the exception of diving that may be associated directly with aquaculture operations.	Exclusion zones; Physical occupation of space, collision risks	May have a greater impact during swimming seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent	Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict.	Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks**
	Surface Water Sports	N	Surface Water Sports are incompatible with Aquaculture facilities due to conflict with human safety, operation security, and interference with navigation safety. When siting new aquaculture facilities, coordination with recreational stakeholder groups should be conducted to avoid siting in those areas heavily utilized by those engaging in surface water sports. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and should adhere to all laws and regulations governing their activity.	Exclusion zones: Physical occupation of space; potential impacts to navigation safety	May have a greater impact during peak recreational seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent	When siting new aquaculture facilities, coordination with recreational stakeholder groups should be conducted to avoid siting in those areas heavily utilized by those engaging in surface water sports .Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict.**	Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and should adhere to all laws and regulations governing their activity.
	Boating	N	Aquaculture and boating are incompatible in the same location, with the exception of those vessels directly involved with aquaculture facility operations. Conflicts can arise when gear (set or derelict) creates obstacles or entanglement hazards that impede navigation safety. The siting of aquaculture areas should be coordinated to avoid or minimize impacts to navigation routes or other areas heavily utilized by boaters. Safe operating distance should be maintained between boats and aquaculture facilities. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. All persons born on or after January 1,	Physical occupation of space, Exclusion areas, gear impedes recreational use; derelict fishing gear can create navigational risks	May have a greater impact during boating seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent	The siting of aquaculture areas should be coordinated to avoid or minimize impacts to navigation routes or other areas heavily utilized by boaters; Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict.	Safe operating distance should be maintained between boats and aquaculture facilities. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations; Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to

AQUACULTURE CONSIDERATIONS							
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			1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations.				upland properties, channels, creeks, marinas and docks; commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity.
	Hunting	N	Aquaculture and hunting are incompatible in the same location. Conflicts can arise when gear (set or derelict) creates obstacles or entanglement hazards that impede navigation safety. The siting of aquaculture areas should be coordinated to avoid or minimize impacts to navigation routes or designated hunting areas. Safe operating distance should be maintained between boats and aquaculture facilities. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Non-toxic-shot, as approved by the U.S. Fish and Wildlife Service, is required for all waterfowl hunting within the State of Delaware.	Physical occupation of the same space at the same time ; gear (set or derelict) can create obstacles or entanglement hazards that would impede navigation safety; exclusion zones; impacts from hunting	May have a greater impact during hunting seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent; Vessels directly associated with aquaculture activities	Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict. ;Avoid siting aquaculture facilities within designated hunting areas.	Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks; commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity.**; Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program; Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations.
Habitat & Organisms	Air	Conditionally Compatible	Aquaculture impacts to Air (habitat and organisms) are minimal dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Vessel/boat activity may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Physical occupation of space; new feeding/predation opportunities, displacement of existing species	Greatest impacts could be from migratory and wintering birds (fish aquaculture)		Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Vessel/boat activity may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Water	Conditionally Compatible	Aquaculture impacts to Water (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Vessel/boat activity associated with the operation of the facility may result in increased water pollution resulting from spills, and marine debris including derelict gear which can create entanglement hazards for marine organisms. Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded or minimalized during operation. Water quality impacts directly related to facility operations are dependent on the type of operation conducted (e.g. shellfish may increase water quality as they filter impurities while fish operations may decrease water quality due to increased levels of ammonia). When siting new aquaculture areas, sites should be evaluated to minimize impacts to sensitive resource areas and should have sufficient circulation or flushing to support good water quality. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Presence of significant commercial species; impacts to flora/fauna/ escape of penned species; transmission of disease to wild stock; displacement of existing species; new feeding/predation opportunities, accidental introduction of exotic species*		When siting new aquaculture areas, sites should be evaluated to minimize impacts to sensitive resource areas and should have sufficient circulation or flushing to support good water quality.	Vessel/boat activity associated with the operation of the facility may result in increased water pollution resulting from spills, and marine debris including derelict gear which can create entanglement hazards for marine organisms. Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded or minimalized during operation. Water quality impacts directly related to facility operations are dependent on the type of operation conducted (e.g. shellfish may increase water quality as they filter impurities while fish operations may decrease water quality due to increased levels of ammonia). Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
	Bottom	Conditionally Compatible	Aquaculture impacts to Bottom (habitat and organisms) are dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel/boat operators. Impacts to the benthic habitat may result from disturbance or destruction of the habitat, gear placement and marine debris including derelict fishing gear which can smother benthic habitat and organisms. Aquaculture facility operators should employ best management practices to limit or reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. To minimize additional impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid siting aquaculture facilities in sensitive resource areas. Those engaging in aquaculture activities must adhere to all	Presence of significant commercial species; impacts to flora/fauna/ escape of penned species; loss of common species; replacement of existing common with aquaculture species; threats to endangered species, accidental introduction of exotic species*		When siting new aquaculture areas, sites should be evaluated to minimize impacts to sensitive resource areas and should have sufficient circulation or flushing to support good water quality.	Aquaculture facility operators should employ best management practices to limit or reduce impacts during operation. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. To minimize additional impacts, which can affect breeding, foraging, and nursery grounds, coordination with resource agencies should be conducted to avoid siting aquaculture facilities in sensitive resource areas. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.

AQUACULTURE CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.				
Resources	Cultural/Historical	N	Aquaculture facilities are incompatible with Cultural and Historic resources. Coordination with resource agencies is required to avoid the damage or undermining of these resources that may result from the placement of gear and day-to-day aquaculture activities.	Damage to resource		Sites should not be in areas that would pre-empt important Aboriginal, commercial or recreational fisheries as determined by the providence in consultation with First Nations and DFO; sites are generally located 1,500-2000 feet offshore to minimize conflict; do not site in areas of cultural or heritage significance as determined by local or federal laws or policies.	Coordination with resource agencies is required to avoid the damage or undermining of these resources that may result from the placement of gear and day-to-day aquaculture activities.
	Viewscape	N	Aquaculture facilities and Viewscapes are generally not considered compatible. Sentiment suggests the equipment and materials necessary for anchoring and locating clutter the view depending on the type of operation. When siting new aquaculture areas, resource and permitting agencies should be coordinate with all stakeholders to reduce potential conflict.	Markers used to zone off aquaculture areas would impact views; Bottom cultures have little/no visual impacts; oceanfront homeowners could experience the loss of aesthetic value*		When siting new aquaculture areas, resource and permitting agencies should be coordinate with all stakeholders to reduce potential conflict; Do not site in areas of cultural or heritage significance as determined by local or federal laws or policies.	

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	Compatibility of swimming and diving and renewable energy is conditionally dependent on the location and the type and location of energy infrastructure. Swimming and diving should be restricted in tidal or wave energy areas. To maximize compatibility, coordination between agencies and stakeholder should begin early in the development process and tidal and wave energy areas should not be constructed within designated swimming areas heavily utilized for recreation. A public kiosk should be created within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to swimming and diving. All nautical charts should be updated through coordination with USCG and NOAA OCS.	Conditionally dependent on renewable energy type (wind) and draft of associated vessel. Physical occupation of space; water quality and clarity during construction;	Potential considerations during construction phase; long term impacts greatest during swimming/diving seasons	Do not construct tidal and wave energy areas in designated swimming area. Coordinate with	Painting scheme must maximize safety; Erect a public kiosk within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to swimming and diving. Coordinate with USCG & NOAA OCS to update nautical charts. Anchoring in energy areas is prohibited.
	Pipelines and Cables	Conditionally compatible	Swimming and diving is conditionally compatible in areas near pipelines and cables. When possible swimmers and divers should avoid areas at or near pipelines and cables, unless they understand and assume the potential risks associated with these areas. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving. Restriction zones should be created around unburied pipelines and cables for the safety of both the recreational users and the pipeline infrastructure. Educational signage or materials should be posted to warn areas users of the risks associated with pipelines and cables. Coordination between stakeholder groups and responsible agencies should be conducted to reduce impacts during peak recreational seasons and avoid popular recreation or tourism sites. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Minor risks associated with swimming/diving near cable/pipeline infrastructure; swimming and diving should be avoided around landing sites.	Potential considerations during construction phase; long term impacts greatest during swimming/diving seasons. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas most for swimming and diving. Create exclusion zones for safety. Increase swimmer/diver safety by providing signage detailing risks associated with activities around pipelines and cables. Clearly post signs in areas where swimming and diving is prohibited. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
	Oil & LNG	N	Swimming and diving is not compatible with oil and natural to security concerns and risks to human safety, with exception to commercial diving activities associated with the maintenance and operation of the facility. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving when siting supporting infrastructure such as pipelines and cables. Coordination between stakeholder groups and resource agencies is necessary to minimize disturbance and address any potential public concerns. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Not compatible in exclusion zones; Minor risks associated with swimming/diving near pipeline infrastructure; swimming and diving should be avoided around platform and landing sites.	Potential considerations during construction phase; long term impacts greatest during swimming/diving seasons. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving when siting supporting infrastructure such as pipelines and cables.	Review recreational use data to identify those areas most for swimming and diving. Create exclusion zones for safety. Increase swimmer/diver safety by providing signage detailing risks associated with activities around pipelines and platforms. Clearly post signs in areas where swimming and diving is prohibited. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Outfalls	Conditionally Compatible	Swimming and diving is conditionally compatible with outfalls and is dependent on the location of outfall infrastructure. Swimmers and divers should avoid discharge areas near outfall infrastructure. Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving. Coordination between stakeholder groups and resource agencies is necessary to minimize disturbance and address any potential public concerns. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.	Establish exclusion zones for swimming and diving near point of discharge due to potential health/exposure issues.	Potential considerations during construction phase; temporary disruption of beach/swimming access in cases of exceeding water quality standards; potential temporary impacts from seepage or rupture.	Due to potential for exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, and pharmaceuticals, outfall water discharge should be located a safe distance offshore away from swimming beaches. Evaluate potential sites, identifying those more heavily utilized for swimming and diving and consider avoid or reducing impacts to those areas; Recreational use data should be evaluated to identify and avoid areas heavily used for swimming and diving. Coordination between stakeholder groups and resource agencies is necessary to minimize disturbance and address any potential public concerns.	Sanitation/stormwater control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards; Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation.
Maritime	Dredging	N	Swimming and diving is not compatible with dredging operations due to potential safety issues. If dredging must be conducted in a location where swimming and diving occurs, restrictions including a minimum buffer zone must be implemented to prevent swimmers or divers from entering the area until dredging is complete.	Physical occupation of space; Swimming and diving activities should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by divers avoid disrupting resources within these sites	Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized recreational areas during peak recreational seasons, utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc); If dredging must be conducted in a location where swimming and diving occurs, restrictions including a minimum buffer zone must be implemented to prevent swimmers or divers from entering the area until dredging is complete.
	Ports	Conditionally Compatible	Human safety and port security preclude swimming and diving from occurring in ports, with the exception of commercial diving associated directly with port operations. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict.	Existing ports are avoided by recreationalists; swimming and diving at own risk, most likely will not overlap ; construction of new ports could impact water quality	Temporary closure of beaches during construction of a new port	Avoid construction during peak recreational season	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict.

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessels	N	Swimming and diving are incompatible with large vessel traffic due to conflict with human safety and security, with the exception of commercial diving associated directly with vessel maintenance. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.	Not compatible in the same area; incompatible with large vessel traffic, mostly occurs in shallow water without large vessel interference			Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.
	Anchorages	Conditionally compatible	Swimming and Diving within anchorages is conditionally compatible and is dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security and navigation issues, with the exception of commercial diving associated directly with vessel maintenance. Those engaging in swimming and diving activities within an anchorage should maintain minimal distances from anchored vessels and should give right of way to vessels entering or departing from anchorages.	Increased vessel traffic with new anchorages; vessel type; collision risks			Conflicts may occur due to risks associated with human safety, security and navigation issues, with the exception of commercial diving associated directly with vessel maintenance. Those engaging in swimming and diving activities within an anchorage should maintain minimal distances from anchored vessels and should give right of way to vessels entering or departing from anchorages.
	Vessel Routes/ATON	Conditionally compatible	Swimming and Diving in or near vessel routes is conditionally compatible and is dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security and navigation issues and therefore, swimming and diving in or near vessel routes is not advised with the exception of commercial diving associated directly with maintenance related to vessels or Aids to Navigation. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag. Persons must be certified to climb on to Aids to Navigation. Anyone engaging in swimming or diving at or near an Aid to Navigation should adhere to the US Coast Guard's rules governing these structures.	Human safety, security, navigation issues and increased potential for collision risks.	Increase activity during peak recreational season	Avoid construction in important recreational activity areas	Those engaging in swimming and diving should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Security	Conditionally compatible	Swimming and Diving is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, swimmers and divers should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring.	Not compatible in the same area	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Swimmers and divers should avoid using these areas, due to security risks	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring.

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Fishing & Recreation	Fishing Gear (Pelagic)	N	Swimming and Diving is not a compatible activity in areas of where Fishing Gear (pelagic) is actively in use. The conflicts are risks to human and navigation safety. People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Interference with scuba divers (entanglement)			People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
	Fishing Gear (Bottom)	Conditionally Compatible	Swimming and Diving are conditionally compatible activities in areas of where Fishing Gear (bottom) are deployed depending on the type of gear in use. The conflicts are risks to human and navigation safety. People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. To reduce conflicts among these activities, swimmers and divers should avoid areas where active fishing is occurring with gear types such as nets or dredges and should not interfere with passive gear such as fishing pots. Additionally bottom gear should avoid deploying gear in those areas heavily used for recreational activities.	Interference with scuba divers (entanglement)	Increase activity during peak recreational season	To reduce conflicts among these activities, swimmers and divers should avoid areas where active fishing is occurring with gear types such as nets or dredges and should not interfere with passive gear such as fishing pots.	People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those in engaging swimming or diving should use increased caution outside designated areas and be aware of other surrounding vessel activity. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. Additionally bottom gear should avoid deploying gear in those areas heavily used for recreational activities.

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	N	Swimming and diving are incompatible with Aquaculture facilities due to conflict with human safety and operation security, with the exception of diving that may be associated directly with aquaculture operations.	Exclusion zones; Physical occupation of space, collision risks	May have a greater impact during swimming seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent	Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict.**	Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks**
	Swimming /Diving	Y	Swimming and Diving within areas where other swimming and diving is occurring are compatible activities. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.				Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.
	Surface Water Sports	Conditionally Compatible	Swimming and Diving is conditionally compatible with Surface Water Sports depending on the type of sport involved. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from others recreating in the vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.	Physical occupation of space; potential injuries if these uses interact		Users should avoid designated swimming areas	Users should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from others recreating in the vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.
	Boating	Conditionally Compatible	Swimming and Diving is conditionally compatible with boating. Boating is frequenting used in conjunction with swimming or diving, however, conflicts may arise pertaining to human and navigational safety. Those engaging in swimming or diving should do so in areas designated for such activities. If outside these areas, avoid those areas known for high vessel traffic and deploy markers to alert boat operators of the presence of people in the water. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Not compatible in the same area, but buffer areas are in place to prevent collisions	Seasonal traffic	Swimming and diving areas	Engaging in swimming or diving in areas designated for such activities. If outside these areas, avoid those areas known for high vessel traffic and deploy markers to alert boat operators of the presence of people in the water; Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Hunting	Conditionally Compatible	Swimming and Diving and Hunting are conditionally compatible in the same areas as these activities generally are not expected to occur at the same time during the year. Swimming and Diving should be avoided in areas where active hunting is occurring due to risks to human safety. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.	Physical occupation of the same space at the same time (competition)	Seasonal hunting; possible increase of boat traffic in popular hunting areas	Designation of additional hunting areas should consider areas used for surface water sport activities to avoid navigational risks.	Swimming and Diving should be avoided in areas where active hunting is occurring due to risks to human safety; Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity; Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.
Habitat & Organisms	Air	Y	Swimming and Diving have minimal impacts to Air (habitat and bottom). Vessels or boats associated with these activities may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Increased air emissions	Increased air emissions during peak recreational season		
	Water	Y	Swimming and Diving have minimal impacts to Water (habitat and bottom). Vessels or boats associated with these activities may result in increased water pollution resulting from accidental spills; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded during operation. Swimmers and Divers should not engage in activities that harass or harm marine organisms including touching or collection, destroying or damaging habitat supporting these organisms without properly authorized permits.	Marine debris from users; harassment to marine organisms from swimmers and divers	Increased amount of marine debris during peak recreational season		Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded during operation. Swimmers and Divers should not engage in activities that harass or harm marine organisms including touching or collection, destroying or damaging habitat supporting these organisms without properly authorized permits.
	Bottom	Conditionally Compatible	Swimming and Diving have minimal impacts to Bottom (habitat and bottom). Vessels or boats associated with these activities may result in increased water pollution resulting from accidental spills; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded during operation. Swimmers and Divers should not engage in activities that harass or harm marine organisms including touching or collection, destroying or damaging habitat supporting these organisms without properly authorized permits.	Marine debris from users; disturbance to bottom habitat from anchoring recreational diving boats; reduced water quality	Increased amount of marine debris during peak recreational season		Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure water quality standards are not exceeded during operation. Swimmers and Divers should not engage in activities that harass or harm marine organisms including touching or collection, destroying or damaging habitat supporting these organisms without properly authorized permits.

SWIMMING/DIVING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Resources	Cultural/Historical	N	Swimming and Diving is conditionally compatible to Cultural or Historic impact (habitat and bottom). Those engaging in activities at or near cultural or historic resource areas must refrain from activity that will result in the damage or destruction of the resource in those areas. Vessels or boats associated with these activities have the potential to damage sensitive resource sites as a result of anchoring or wake action. Resource agencies should coordinate with the US Coast Guard and NOAA OCS to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation including anchoring restrictions.	Direct impact to surface resources; important shipwrecks to recreational divers and guided tours*	Increased use of swimming/diving areas during peak recreational seasons	When designating a new swimming or diving area, resource agencies should coordinate with all stakeholder groups to avoid or reduce conflicts by selecting sites in areas these activities are not considered negatives.	Those engaging in activities at or near cultural or historic resource areas must refrain from activity that will result in the damage or destruction of the resource in those areas. Vessels or boats associated with these activities have the potential to damage sensitive resource sites as a result of anchoring or wake action. Resource agencies should coordinate with the US Coast Guard and NOAA OCS to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation including anchoring restrictions.
	Viewscape	Y	The impacts of Swimming and Diving are minimal to a Viewscape. People will congregate in designated swimming areas which, depending on one's perception may be considered a negative. When designating a new swimming or diving area, resource agencies should coordinate with all stakeholder groups to avoid or reduce conflicts by selecting sites in areas these activities are not considered negatives.	Large crowds of people at a popular location can be considered negative	Increased use of swimming/diving areas during peak recreational seasons	When designating a new swimming or diving area, resource agencies should coordinate with all stakeholder groups to avoid or reduce conflicts by selecting sites in areas these activities are not considered negatives.	

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	Compatibility of surface water sports and renewable energy depends on several conditions: type of renewable energy, vessel draft, location of the energy area and potential exclusion zones. Tidal and wave energy areas should not be constructed areas heavily utilized for surface water sports to prevent entanglement or other navigation safety issues. To maximize compatibility, coordination between agencies and stakeholder should begin early in the development process. A public kiosk should be created within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to swimming and diving. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS.	Conditionally dependent on renewable energy type (wind and tidal) and draft of vessel. Physical occupation of space (wind and wave infrastructure); exclusion zones; risks include potential entanglement or navigation safety wind and wave infrastructure.	Potential considerations during construction phase; long term impacts greatest during peak recreational season.	Evaluate potential sites, identifying those more heavily utilized for surface water recreation and consider avoid or reducing impacts to those areas; coordination between agencies and stakeholder should begin early in the development process to reduce or avoid impacts to the area.	Restriction zones should be created around unburied pipelines and cables for the safety of both the recreational users and the pipeline infrastructure. Maintain open dialogue with stakeholder organizations to maximize compatibility and reduce risk. Painting scheme must maximize safety; Erect a public kiosk within visible range of site location, or a public display in local city or tourism office or library to teach about the benefits of renewable energy, and safety issues related to surface water sports. To increase surface water sports safety, signs should be clearly posted in prohibited areas with information detailing risks associated with activities around pipelines and cables. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Pipelines and Cables	Conditionally compatible	Surface water sports and pipelines and cables are conditionally compatible activities. To increase surface water sports safety, signs should be clearly posted in prohibited areas with information detailing risks associated with activities around pipelines and cables. Unburied pipelines and cables could interfere with surface water safety, particularly near landfall areas. Recreational use data should be evaluated to identify and avoid areas heavily used for surface water sports. Restriction zones should be created around unburied pipelines and cables for the safety of both the recreational users and the pipeline infrastructure. Coordination between stakeholder groups and responsible agencies should be completed to reduce impacts during peak recreational seasons and avoid popular recreation or tourism sites. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters..	Unburied cables can interfere with surface water sport safety, physical occupation of space,	Potential considerations during construction phase; long term impacts greatest during peak recreational season. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites; Construction of new pipelines and cables should be limited or postponed during peak recreational seasons.	Review recreational use data to identify those areas most for boating. Create exclusion zones for safety. Increase surface water sports safety by providing signage detailing risks associated with activities around pipelines and cables. Clearly post signs in areas where surface water sports is prohibited. All nautical charts should be updated through coordination with USCG and NOAA OCS.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Oil & LNG	Conditionally compatible	The compatibility of surface water sports and oil and natural gas infrastructure is dependent on several conditions including vessel size, location of oil and natural gas area and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for surface water sports. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Not compatible in exclusion zones; Minor risks associated with surface water sports near pipeline infrastructure; surface water sports should be avoided around platform and landing sites.	Potential considerations during construction phase; long term impacts greatest during peak recreational season. Limit or postpone construction during peak recreational seasons	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas most for boating. Create exclusion zones for safety. Increase surface water sports safety by providing signage detailing risks associated with activities around pipelines and platforms. Clearly post signs in areas where surface water sports is prohibited. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Outfalls	Conditionally Compatible	Surface water sports and outfalls are conditionally compatible. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for surface water sports. Signs should be clearly posted in prohibited areas with information detailing risks associated with surface water sports activities near outfalls. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Establish exclusion zones for surface water sports near point of discharge due to potential health/exposure issues.	Potential considerations during construction phase; temporary disruption of surface water sports in cases of exceeding water quality standards; potential temporary impacts from seepage or rupture.	Evaluate potential sites, identifying those more heavily utilized for surface water sports and consider avoid or reducing impacts to those areas due to potential for exposure to concentrations of pathogens, metals, volatiles, semi-volatiles, PCBs, and pharmaceuticals.	Sanitation/stormwater control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards; Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Maritime	Dredging	N	Surface water sports are not compatible with active dredging operations due to potential safety issues. If dredging must be conducted in a location where surface water sports occur, restrictions including a minimum buffer zone must be implemented to prevent recreational users from entering the area until dredging is complete. Dredging has the potential to affect wave action as a result of altering the bottom topography. Coordination with stakeholders should be conducted when dredging is proposed in those areas that area heavily utilized by those engaging in surface water sports to avoid or reduce dredging operations from occurring during peak recreational periods and from altering the environment such that surface water sport activities would be precluded in the future. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; surface water sports should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Coordination with stakeholders should be conducted when dredging is proposed in those areas that area heavily utilized by those engaging in surface water sports to avoid or reduce dredging operations from occurring during peak recreational periods and from altering the environment such that surface water sport activities would be precluded in the future; Evaluate recreational use data to identify areas heavily utilized by surface water sports avoid disrupting natural processes within these sites (i.e wave action); Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized recreational areas during peak recreational seasons,	If dredging must be conducted in a location where surface water sports occur, restrictions including a minimum buffer zone must be implemented to prevent recreational users from entering the area until dredging is complete; Utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc); All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Ports	Conditionally Compatible	Human safety and port security preclude Surface Water Sports from occurring in ports. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Interference with navigational safety		Avoid construction during peak recreational season	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Vessels	N	Surface water sports and vessel activity is incompatible and should be avoided due to interference with vessel navigational safety, human safety, potential collision risks, and security concerns. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Higher traffic on the bay and river, decreased recreational opportunity; users use the wake of boats for recreation	Increased seasonal traffic	Routes for larger vessels should established and clearly marked with ATONs.	Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Anchorages	Conditionally Compatible	Surface water sports within anchorages are conditionally compatible and are dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security, navigation issues and increased potential for collision risks. Those engaging in surface water sports within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased vessel traffic with new anchorages; vessel type; collision risks	Increased seasonal vessel traffic	Avoid construction in important recreational activity areas	Those engaging in surface water sports within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Vessel Routes/ATON	Conditionally compatible	Surface water sports along vessel routes are conditionally compatible and are dependent upon the type of surface water sport and presence and type of vessel activity in the vicinity. Conflicts may occur due to risks associated with human safety, security, navigation issues and increased potential for collision risks. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Necessary for navigational safety		Avoid construction in important recreational activity areas	People engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Security	Conditionally Compatible	Surface Water Sports is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, those conducting surface water sports should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Exclusion areas	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Surface water sports should avoid using security areas	Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Fishing & Recreation	Fishing Gear (Pelagic)	N	Surface Water Sports are not compatible activities in areas of where Fishing Gear (pelagic) is actively in use and should be avoided due to interference with navigational safety, human safety, potential collision risks and entanglement, either with active or derelict gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from vessels and giving proper right-of-way to priority vessels and boats. Boats and vessels within an area where surface water sports may occur, should maintain awareness of the presence of recreational activity in their vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Can interfere with recreational users; entanglement from derelict fishing gear;	Increase during popular fishing seasons		People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
	Fishing Gear (Bottom)	Conditionally compatible	Surface Water Sports are conditionally compatible activities in areas of where Fishing Gear (bottom) is deployed depending on the type of gear in use. The conflicts are risks to human and navigation safety. People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. To reduce conflicts among these activities, those engaging surface water sports should avoid areas where active fishing is occurring with gear types such as nets or dredges and should avoid passive gear such as fishing pots. Additionally bottom gear should avoid deploying in those areas heavily used for recreational activities.	Can interfere with recreational users; entanglement from derelict fishing gear;	Increase during popular fishing seasons	Those engaging surface water sports should avoid areas where active fishing is occurring with gear types such as nets or dredges and should avoid passive gear such as fishing pots. Additionally bottom gear should avoid deploying in those areas heavily used for recreational activities.	People engaging in water/boat related activities should be aware of their surroundings, follow navigation safety rules and maintain a safe distance from other vessels or users in the water. Those engaging in activities utilizing bottom fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	N	Surface Water Sports are incompatible with Aquaculture facilities due to conflict with human safety, operation security, and interference with navigation safety. When siting new aquaculture facilities, coordination with recreational stakeholder groups should be conducted to avoid siting in those areas heavily utilized by those engaging in surface water sports. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and should adhere to all laws and regulations governing their activity.	Exclusion zones: Physical occupation of space; potential impacts to navigation safety	May have a greater impact during peak recreational seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent	When siting new aquaculture facilities, coordination with recreational stakeholder groups should be conducted to avoid siting in those areas heavily utilized by those engaging in surface water sports. Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict.**	Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks** All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and should adhere to all laws and regulations governing their activity.
	Swimming /Diving	Conditionally Compatible	Swimming and Diving is conditionally compatible with Surface Water Sports depending on the type of sport involved. Those engaging in surface water sports should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from others recreating in the vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.	Physical occupation of space; potential injuries if these uses interact		Users should avoid designated swimming areas	Users should adhere to all applicable regulations and safety standards associated with the sport, including maintaining minimum distances from others recreating in the vicinity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.
	Surface Water Sports	Conditionally compatible	Conducting multiple Surface Water Sports in the same area is conditionally compatible depending on the specific activities being conducted. Those engaging in Surface Water Sports should adhere to all regulations and guidelines for that specific sport, including staying within designated areas, if applicable, using Aids to Navigation, maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of the same space at the same time (competition)	Seasonal traffic; increased navigation safety risks		Users must adhere to all regulations and guidelines for that specific sport, including staying within designated areas, if applicable, using Aids to Navigation, maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Boating	Conditionally Compatible	Conducting Surface Water Sports is conditionally compatible with Boating. Depending on the activity being conducted, boating may be an essential component of the water sport. Those engaging in either activity should adhere to all regulations and guidelines applicable to that activity, including maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of the same space at the same time (competition)	Seasonal traffic; increased navigation safety risks		Boaters must adhere to all regulations and guidelines applicable to that activity, including maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Hunting	Conditionally Compatible	Hunting and Surface Water Sports are conditionally compatible activities. The hunting season does overlap with the end of the recreational season; therefore there is a conflict with potential human and navigational safety. Those engaging in surface water sports should avoid designated hunting areas actively in use and maintain a safe operating distance between themselves and other boaters and hunters to avoid human safety and navigational risks. Hunter should maintain an increased level of awareness to activity occurring around. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Physical occupation of the same space at the same time (competition)	Seasonal hunting; possible increase of boat traffic in popular hunting areas	Proper management practices should be employed for designated hunting areas and surface water sport space to avoid navigational risks.	Those engaging in surface water sports should avoid designated hunting areas actively in use and maintain a safe operating distance between themselves and other boaters and hunters to avoid human safety and navigational risks; Hunter should maintain an increased level of awareness to activity occurring around; Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.
Habitat & Organisms	Air	Conditionally Compatible	Surface Water Sports is conditionally compatible to Air (habitat and bottom). Vessels or boats associated with these activities may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Increased boat traffic creats an increase in boating emissions	Increased boat emissions from seasonal activities		Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Water	Conditionally Compatible	The potential impact Surface Water Sport may have on Water (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Boating involved with these activities may result in negative impacts to water quality as a result of normal operation or accidental spills; therefore, boat operators should employ BMPs to limit or reduce impacts and ensure water quality impacts are limited. Depending on the type of activity underway, those engaging in Surface Water Sports should avoid marine protected areas and other sensitive resource areas or use caution when operating in those areas to avoid impacting the marine resources present. Boat operators should adhere to seasonal speed restriction and should be aware of the presence of marine mammals, sea turtles or other animals in their vicinity to avoid collision. Boats and other recreational vessels may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality. Boaters mooring vessels are marinas should remove their boats at the end of the boating season to protect the boat from the winter elements and to prevent excess leaching of toxic bottom paints. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased underwater sound that will interfere with social animal communication, increased marine animal strikes; water quality and benthic habitats as result of normal operators; increased potential for marine debris or accidental spills	Seasonal traffic;	Users should follow speed restrictions and practice respectful wildlife viewing	Vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation; boaters should adhere to all regulations during boat operations; Boaters should avoid anchoring in marine protected areas or other sensitive resource areas and maintain reduce speed in designated areas to avoid impacts from wakes; Boaters should avoid marine protected areas and other sensitive resource areas or use caution when operating in those areas to avoid impacting the marine resources present; o reduce strikes with marine mammals or sea turtles, boat operators should adhere to seasonal speed restriction and should be aware of the presence of marine mammals or other animals in their vicinity to avoid collision; use antifouling paint that does not negatively impact water quality; Boaters mooring vessels are marinas should remove their boats at the end of the boating season to protect the boat from the winter elements and to prevent excess leaching of toxic bottom paints; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Bottom	Conditionally compatible	Certain Surface Water Sports have the potential to impact Bottom (habitat and organisms) and is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by boat operators engaging in these sports. Boating activities may result in negative impacts to water quality and benthic habitats as a result of normal operation, increased marine debris or accidental spills; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation. Additionally, anchoring can significantly impact benthic habitat, including sensitive resource areas and essential fish habitats. Boaters and users of other types of recreational vessels and should avoid anchoring in marine protected areas or other sensitive resource areas and maintain reduce speed in designated areas to avoid impacts from wakes.	Increased marine debris or accidental spills; reduced water quality			Vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation; Boaters and users of other types of recreational vessels and should avoid anchoring in marine protected areas or other sensitive resource areas and maintain reduce speed in designated areas to avoid impacts from wakes.

SURFACE WATER SPORTS CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Resources	Cultural/Historical	Conditionally compatible	Engaging in Surface Water Sports is conditionally compatible with cultural and historic resources. Depending on the location and depth of the cultural or historic resource, and the specific type of sport, recreationalists may be able to pass over without impacts. However, these locations should be identified to restrict anchoring to prevent physical damage. Potential effects may occur on shorelines from vessel wakes. Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce these impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur.	Direct impacts to surface resources; impact dependent of depth, type of surface water sport and location of the resource	Seasonal traffic; Vessel wake damage to resources	Locations should be identified to restrict anchoring to prevent physical damage	Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce these impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur.
	Viewscape	Conditionally compatible	Surface Water Sport impacts on viewscape are generally minimal. Visual impacts are temporary, depending on location, but are considered to go hand in hand with waterways. Those areas located near docking facilities or marinas, or designated recreational areas may experience additional visual impacts. The siting of new docking facilities or designation of new recreational areas should be coordinated with all potential stakeholders to determine how impacts may be avoided or minimized.	Diminished viewshed; location dependent	Seasonal traffic	New docking facilities should be coordinated with all potential stakeholders to determine how impacts may be avoided or minimized.	

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	Potential conflicts exist between boating and renewable energy infrastructure due to risk to navigation safety and damage to the infrastructure. To maximize compatibility, recreational use data should be used to identify areas most heavily used by boaters to prevent interference with navigation safety and reduce impacts to the areas during construction. Vessel type restrictions, exclusion zone limitations and prohibiting anchors in renewable energy areas should be coordinated with federal authorities. The painting scheme of renewable energy infrastructure should maximize safety, but minimize visual impacts. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS	Physical occupation of space; exclusion zones; risks include potential entanglement or interference with navigation safety	Potential considerations during construction phase; long term impacts greatest during boating season.	Evaluate potential sites, identifying those more heavily utilized for boating and consider avoid or reducing impacts to those areas; Vessel type restrictions, exclusion zone limitations and prohibiting anchors in renewable energy areas should be coordinated with federal authorities	Review recreational use data to identify those areas most heavily used by boaters. Leisure and fishing craft can move through the wind energy area during the operational period; not allowed to create exclusion zones that would prevent sailing within wind farm site; painting scheme must maximize safety, but minimize visual impact; all oil filled equipment would be fully bundled to ensure no spillage in the event of a leak or puncture in any vessels or the offshore substation; to the extent possible, coordinate with federal authorities to determine vessel type restrictions. Educate boaters on safety practices when operating around renewable energy areas. Anchoring in energy areas is prohibited; All nautical charts should be updated through coordination with USCG and NOAA OCS.
	Pipelines and Cables	Conditionally compatible	Boating and pipelines and cables are conditionally compatible activities. Unburied pipelines and cables have the potential to interfere with boating safety. To increase boating safety, exclusion zones should be created and pipelines and cables must be armored and buried in areas where anchoring and scouring may occur. Recreational use data should be evaluated to identify areas heavily used for boating activities. Coordination between stakeholder groups and responsible agencies should be completed to reduce impacts during peak recreational seasons and avoid popular recreation or tourism sites. Boating education should include safety practices when operating around pipelines and cables or landing sites. Construction of new pipelines and cables should be limited or postponed during peak recreational seasons. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Unburied cables and pipelines have the potential to interfere with boating; particularly near landing locations; physical occupation of space, interference to navigation safety	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons; Construction of new pipelines and cables should be limited or postponed during peak recreational seasons; Evaluate sites to avoid popular recreation/tourism sites.	Review recreational use data to identify those areas most for surface water sports. Create exclusion zones for safety. Cable routes must be "armored" and buried in areas where anchoring or scouring might occur. Educate boaters on safety practices when operating around cable and pipeline areas or landing sites. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Oil & LNG	Conditionally compatible	The compatibility of boating activities and oil and natural gas infrastructure is dependent on several conditions including vessel size and maneuverability, location of oil and natural gas area and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the	Not compatible in exclusion zones; Minor risks associated with boating near pipeline infrastructure; swimming and diving should be	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion	Coordinate with stakeholder groups to reduce impacts during peak recreational seasons. Recreational use data should be evaluated to identify and avoid areas heavily used for boating to avoid popular	Create exclusion zones for safety. Where possible, bury pipelines where anchoring or scouring might occur. Educate boaters on safety practices when operating around platforms and pipeline areas or landing sites. Issue a Local Notice to Mariners and the Coast Guard that would specify G&G survey dates, locations and the recommended

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
			development process. Recreational use data should be evaluated to identify and avoid areas heavily used for boating. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	avoided around platform and landing sites; location of oil and natural gas area; vessel size and maneuverability.	and landing site. Limit or postpone construction during peak recreational seasons.	recreation/tourism sites.	avoidance requirements; Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Outfalls	Conditionally Compatible	The compatibility of boating activities and oil and outfalls is dependent on several conditions including vessel draft and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used for boating. To avoid damage or undermining of the outfall infrastructure, boats should be prohibited from anchoring near outfalls. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; anchoring near an ocean outfall could damage or undermine the infrastructure; vessel draft; exclusion zones	Potential considerations during construction phase; temporary disruption of boating in cases of seepage or rupture.	Evaluate potential sites, identifying those more heavily utilized for boating and consider avoiding or reducing damage or undermining of infrastructure due to anchoring; Recreational use data should be evaluated to identify and avoid areas heavily used for boating.	Sanitation/stormwater control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards; boats should be prohibited from anchoring near outfalls; Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. .

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Maritime	Dredging	Conditionally Compatible	Dredging is necessary to maintain navigable conditions in certain waterways. Coordination is necessary to ensure proper channel depths are maintained for the type and size of vessels allowed to transgress specified waterways in order to avoid impacts to navigation safety. If dredging must be conducted in a location where boating occurs, restrictions including a minimum buffer zone must be implemented to prevent boaters from entering the area until dredging is complete. Coordination with stakeholders should occur to avoid or reduce dredging operations from occurring during peak recreational periods. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; boating should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by boating avoid disrupting natural processes within these sites (i.e. wave action); Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized recreational areas during peak recreational seasons	If dredging must be conducted in a location where boating occurs, restrictions including a minimum buffer zone must be implemented to prevent boaters from entering the area until dredging is complete; Utilize dredging practices to allow for rapid restoration of bottom topography through natural processes to minimize impacts on wave conditions, issue local notice to mariners identifying areas in which dredging will be conducted; Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Ports	Conditionally Compatible	Conflicts with port operations, navigational safety, human safety and port security preclude recreational boating from occurring in ports. One exception to this would be the use of a port as a refuge from a storm which may be possible with proper coordination with the port authorities. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Interference with navigational safety	Refuge from storms	Avoid construction during peak recreational season	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Vessels	Y	Boating and vessels are compatible if all navigation and safety regulations are observed by boat/vessel operators. Due an increased risk of collision and interference with navigation safety, a minimum safe operating distance should be adhered to when boating near large vessels. Depending on size and type of vessel exclusion buffers surrounding certain vessels may be larger than others. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Conflicts with commercial vessels, decreased recreational opportunity, increased sound will interfere with social animal communication, increase in marine animal strikes		Consider various levels of government and other stakeholders are considered in the policy process*	Due an increased risk of collision and interference with navigation safety, a minimum safe operating distance should be adhered to when boating near large vessels. Depending on size and type of vessel exclusion buffers surrounding certain vessels may be larger than others. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Anchorages	Conditionally Compatible	Boating within anchorages is conditionally compatible and is dependent upon the presence and type of vessels within the anchorage. Conflicts may occur due to risks associated with human safety, security, navigation issues and increased potential for collision risks. Those engaging in boating activities within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased vessel traffic with new anchorages; vessel type; collision risks	Increased seasonal vessel traffic	Avoid construction in important recreational activity areas	Those engaging in boating activities within an anchorage should adhere to all applicable boating regulations, including maintaining minimum distances from anchored vessels and giving right of way to vessels entering or departing from anchorages. Siting of new anchorages should be evaluated to avoid or minimize areas heavily used for recreational purposes. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Vessel Routes/ATON	Y	Boats rely on established vessels routes with properly placed aids to navigation for safe passage. Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Necessary for navigational safety		Avoid construction in important recreational activity areas	All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Any certificate of boating safety issued in any state and approved by the National Association of State Boating Law Administrators is sufficient* Do not stop or anchor beneath bridges or in the channel. If you do, expect to be boarded by law enforcement officials; Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them.
	Security	Conditionally Compatible	Boating is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, boaters should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Exclusion areas	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Avoid siting designated hunting areas within security zones	Observe and avoid all security zones; Avoid commercial port operation areas, especially those that involve military, cruise line or petroleum facilities; Observe and avoid other restricted areas near dams, power plants, etc.; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters;

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	Fishing Gear (pelagic) and boating are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Gear that floats or suspends in the water column will conflict with boating activities, Physical occupation of the same space at the same time (competition)	Seasonal traffic and fishing	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes)	Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Address the derelict fishing gear problem through the Fishing for Energy Partnership to provide commercial fishermen with no-cost opportunities to dispose of derelict and retired fishing gear; obtain grant support through the Fishing for Energy partnership for direct removal and assessment of derelict fishing gear**
	Fishing Gear (Bottom)	Conditionally Compatible	Fishing Gear (bottom) and boating are conditionally compatible. Commercial and recreational fishing vessels are used in the deployment, maintenance and retrieval of fishing gear. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards that impede navigation safety. Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Gear entanglement with boat engines; Physical occupation of the same space at the same time (competition)	Seasonal traffic		Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between boats and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Aquaculture	N	Aquaculture and boating are incompatible in the same location, with the exception of those vessels directly involved with aquaculture facility operations. Conflicts can arise when gear (set or derelict) creates obstacles or entanglement hazards that impede navigation safety. The siting of aquaculture areas should be coordinated to avoid or minimize impacts to navigation routes or other areas heavily utilized by boaters. Safe operating distance should be maintained between boats and aquaculture facilities. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations.	Exclusion areas, gear impedes recreational use; derelict fishing gear can create navigational risks	May have a greater impact during boating seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent	The siting of aquaculture areas should be coordinated to avoid or minimize impacts to navigation routes or other areas heavily utilized by boaters; Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict.	Safe operating distance should be maintained between boats and aquaculture facilities. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations; Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks; commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity.
	Swimming /Diving	Conditionally Compatible	Swimming and Diving is conditionally compatible with boating. Boating is frequenting used in conjunction with swimming or diving, however, conflicts may arise pertaining to human and navigational safety. Those engaging in swimming or diving should do so in areas designated for such activities. If outside these areas, avoid those areas known for high vessel traffic and deploy markers to alert boat operators of the presence of people in the water. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters..	Not compatible in the same area, but buffer areas are in place to prevent collisions	Seasonal traffic	Swimming and diving areas	Engaging in swimming or diving in areas designated for such activities. If outside these areas, avoid those areas known for high vessel traffic and deploy markers to alert boat operators of the presence of people in the water; Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Surface Water Sports	Conditionally Compatible	Conducting Surface Water Sports is conditionally compatible with Boating. Depending on the activity being conducted, boating may be an essential component of the water sport. Those engaging in either activity should adhere to all regulations and guidelines applicable to that activity, including maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of the same space at the same time (competition)	Seasonal traffic; increased navigation safety risks		Boaters must adhere to all regulations and guidelines applicable to that activity, including maintaining awareness of and safe distances from other users in the waterway in order to avoid conflicts that may increase risks to human and navigation safety. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Boating	Conditionally Compatible	Boating while in the presence of other boats is conditionally compatible. To avoid the risks of increased human and navigation safety, boaters must adhere to all regulations regarding navigation safety and maintain a safe operating distance between themselves and other boaters. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased boat traffic; physical occupation of space in popular boating areas	Seasonal traffic; increased navigation safety risks		Boaters must adhere to all regulations regarding navigation safety and maintain a safe operating distance between themselves and other boaters. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Hunting	Conditionally compatible	Hunting and Boating are conditionally compatible activities. Hunters are required to be in boats to engage in this activity. When required by law hunters must remain in those areas designated for this activity; therefore, hunters may be competing for the same space. The hunting season does overlap with the end of the recreational boating season so all boat operators must adhere to boater safety regulations to avoid conflicts. Hunters must also maintain a safe operating distance between themselves and other boaters to avoid human safety and navigational risks. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Physical occupation of the same space at the same time (competition)	Seasonal hunting; possible increase of boat traffic in popular hunting areas	Proper management practices should be employed for designated hunting areas and recreational boating space to avoid navigational risks.	When required by law hunters must remain in those areas designated for this activity; therefore, hunters be competing for the same space; The hunting season does overlap with the end of the recreational boating season so all boat operators must adhere to boater safety regulations to avoid conflicts; Hunters must also maintain a safe operating distance between themselves and other boaters to avoid human safety and navigational risks; Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Habitat & Organisms	Air	Conditionally Compatible	Boating is conditionally compatible to Air (habitat and bottom). Vessels or boats associated with these activities may result in increased air emissions; therefore, vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.	Increased boat traffic creates an increase in boating emissions	Seasonal increase for emissions		Vessel/boat operators should employ best management practices to limit or reduce impacts and ensure air quality standards are not exceeded during operation.
	Water	Conditionally Compatible	The potential impact boats may have on Water (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by vessel operators. Boating activities may result in negative impacts to water quality as a result of normal operation, increased marine debris, or accidental spills; therefore, boat operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation. Boater should avoid marine protected areas and other sensitive resource areas or use caution when operating in those areas to avoid impacting the marine resources present. To reduce strikes with marine mammals or sea turtles, boat operators should adhere to seasonal speed restriction and should be aware of the presence of marine mammals or other animals in their vicinity to avoid collision. Boats may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality. Boaters mooring vessels are marinas should remove their boats at the end of the boating season to protect the boat from the winter elements and to prevent excess leaching of toxic bottom paints. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Increased underwater sound that will interfere with social animal communication, increased marine animal strikes; water quality and benthic habitats as result of normal operators; increased potential for marine debris or accidental spills	Seasonal traffic;		Vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation; boaters should adhere to all regulations during boat operations; Boaters should avoid anchoring in marine protected areas or other sensitive resource areas and maintain reduce speed in designated areas to avoid impacts from wakes; Boaters should avoid marine protected areas and other sensitive resource areas or use caution when operating in those areas to avoid impacting the marine resources present; o reduce strikes with marine mammals or sea turtles, boat operators should adhere to seasonal speed restriction and should be aware of the presence of marine mammals or other animals in their vicinity to avoid collision; use antifouling paint that does not negatively impact water quality; Boaters mooring vessels are marinas should remove their boats at the end of the boating season to protect the boat from the winter elements and to prevent excess leaching of toxic bottom paints; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

BOATING CONSIDERATIONS							
		Compatible (Y/N)		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Bottom	Conditionally Compatible	Boating has the potential to impact Bottom (habitat and organisms) and is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by boat operators. Boating activities may result in negative impacts to water quality and benthic habitats as a result of normal operation, increased marine debris or accidental spills; therefore, vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation. Additionally, anchoring can significantly impact benthic habitat, including sensitive resource areas and essential fish habitats. Boaters should avoid anchoring in marine protected areas or other sensitive resource areas and maintain reduce speed in designated areas to avoid impacts from wakes.	Anchoring impacts to benthic habitat; impacts to water quality and benthic habitats as result of normal operators; increased potential for marine debris or accidental spills	Seasonal traffic; anchoring		Vessel operators should employ best management practices to limit or reduce impacts and ensure water standards are not exceeded during operation; boaters should adhere to all regulations during boat operations; Boaters should avoid anchoring in marine protected areas or other sensitive resource areas and maintain reduce speed in designated areas to avoid impacts from wakes; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
Resources	Cultural/Historical	Conditionally Compatible	Boating is conditionally compatible with cultural and historic resources. Depending on the location and depth of the cultural or historic resource, boaters may be able to pass over without impacts. However, these locations should be identified to restrict anchoring to prevent physical damage. Potential effects may occur on shorelines from vessel wakes. Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce these impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur.	Boat wake associated with the deterioration of the shoreline; depth and location of cultural or historic resource,	Vessel wake damage to resources	Avoid known important sites, such as shipwrecks or others of cultural significance; locations should be identified to restrict anchoring to prevent physical damage	Coordination with the US Coast Guard to reduce vessel speeds through these areas may reduce these impacts. Resource agencies or other cultural or historic stakeholders groups may take proactive steps in establishing offshore breakwaters to minimize the erosion that can occur; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Viewscape	Conditionally Compatible	Boating impacts on viewscape are in the eye of the beholder. Visual impacts are generally temporary, depending on location, but are considered to go hand in hand with waterways. Those areas located near docking facilities or marinas may experience additional visual impacts. The siting of new docking facilities should be coordinated with all potential stakeholders to determine how impacts may be avoided or minimized.	Impacts to culture that looks at the sunrise for cultural purposes	Seasonal traffic	New docking facilities should be coordinated with all potential stakeholders to determine how impacts may be avoided or minimized.	All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.

HUNTING CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
Infrastructure	Renewable	Conditionally compatible	Compatibility of hunting and renewable energy depends on several conditions: type of renewable energy, vessel draft, location of the energy area and potential exclusion zones. Tidal and wave energy areas should not be constructed areas heavily utilized for hunting to prevent entanglement or other navigation safety issues. To maximize compatibility, recreational use data should be used to identify areas most heavily used by hunters to prevent interference with navigation safety and reduce impacts to the areas during construction. Vessel type restrictions, exclusion zone limitations and prohibiting anchors in renewable energy areas should be coordinated with federal authorities. The painting scheme of renewable energy infrastructure should maximize safety, but minimize visual impacts. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Hunter education programs should include safety practices when operating around and within renewable energy areas.	Conditionally dependent on renewable energy type (tidal) and draft of vessel. Physical occupation of space; risk of gear entanglement and navigation safety; exclusion zones.	Potential considerations during construction phase; long term impacts greatest during hunting season.	Evaluate potential sites, identifying those more heavily utilized for hunting and consider avoid or reducing impacts to those areas; Vessel type restrictions, exclusion zone limitations and prohibiting anchors in renewable energy areas should be coordinated with federal authorities.	Review recreational use data to identify those areas most heavily used by hunters. Create exclusion zone for firearm use, painting scheme must maximize safety, but minimize visual impact; all oil filled equipment would be fully bundled to ensure no spillage in the event of a leak or puncture in any vessels or the offshore substation; to the extent possible, coordinate with federal authorities to determine vessel type restrictions. Educate hunters on safety practices when operating around and within renewable energy areas; All nautical charts should be updated through coordination with USCG and NOAA OCS.
	Pipelines and Cables	Conditionally compatible	Hunting and pipelines and cables are conditionally compatible activities. Unburied pipelines and cables have the potential to interfere with boating safety, particularly near landing stations. To increase hunting safety, exclusion zones for firearm use should be created and pipelines and cables must be armored and buried in areas where anchoring and scouring may occur. Recreational use data should be evaluated to identify areas heavily used by hunters. Coordination between stakeholder groups and responsible agencies should be completed to reduce impacts during hunting seasons. Hunting education should include safety practices when operating around pipelines and cables or landing sites. Construction of new pipelines and cables should be avoided during hunting seasons. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range. Duck hunters should use extreme caution when selecting the direction they shoot.	Unburied cables and pipelines have the potential to interfere with boating; particularly near landing locations; physical occupation of space, interference to navigation safety;	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during hunting seasons. Evaluate sites to avoid designated hunting sites.	Review recreational use data to identify those areas most heavily used by hunters. Create exclusion zone for firearm use. Cable routes must be "armored" and buried in areas where anchoring or scouring might occur. Educate hunters on safety practices when operating around cable and pipeline areas or landing sites. All nautical charts should be updated through coordination with USCG and NOAA OCS.

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	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Oil & LNG	Conditionally compatible	The compatibility of hunting and oil and natural gas infrastructure is dependent on several conditions including vessel size, location of oil and natural gas area and potential exclusion zones. To maximize compatibility, coordination between agencies and stakeholder groups should begin early in the development process. Recreational use data should be evaluated to identify and avoid areas heavily used by hunters. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot to avoid damaging oil and natural gas infrastructure. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Not compatible in exclusion zones; Minor risks associated with swimming/diving near pipeline infrastructure; hunting should be avoided around platform and landing sites; location of oil and natural gas area; size of vessels within an area	Potential considerations during construction phase; long term impacts greatest during boating season, resulting from exclusion and landing site. Limit or postpone construction during peak recreational seasons.	Coordinate with stakeholder groups to reduce impacts during hunting seasons. Evaluate sites to avoid designated hunting sites.	Review recreational use data to identify those areas most heavily used by hunters. Create exclusion zone for firearm use. Where possible, bury pipelines where anchoring or scouring might occur. Educate hunters on safety practices when operating around platform and pipeline areas or landing sites. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot to avoid damaging oil and natural gas infrastructure. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All nautical charts should be updated through coordination with USCG and NOAA OCS. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
	Outfalls	Conditionally Compatible	Hunting and outfalls are conditionally compatible. Recreational use data should be evaluated to identify and avoid areas heavily used by hunters. To avoid damage or undermining of the outfall infrastructure, boats should be prohibited from anchoring near outfalls. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Coordination between stakeholder groups and responsible agencies should be completed to reduce or avoid impacts during designated hunting seasons. Coordination with the US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.	Physical occupation of space; anchoring near an ocean outfall could damage or undermine the infrastructure.	Potential considerations during construction phase; temporary disruption of hunting in cases of seepage or rupture.	Evaluate potential sites, identifying those more heavily utilized for hunting and consider avoiding or reducing damage or undermining of infrastructure due to anchoring.	Sanitation/stormwater control agencies provide education and technical assistance to industrial dischargers in reducing the total amount of materials used, or in pre-treating their wastewater to remove specific chemicals used at their facility; regularly monitor effluent near treatment plants; assess the effects of discharge sewage on the marine environment; evaluate BMPs to manage potential environmental impacts to marine waters, provide public outreach and education to citizens about ocean outfalls; avoid tourism season by performing construction during winter months, continually monitor water quality and alert users in periods WQ standards are elevated or exceeded. Outline procedures in an emergency action plan to alert users in the case of ruptures, seepage, and exceedance of water quality standards. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware. Coordination between stakeholder groups and responsible agencies should be completed to reduce or avoid impacts during designated hunting seasons. Coordination with the

HUNTING CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
							US Coast Guard is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters.
Maritime	Dredging	Conditionally Compatible	Dredging is necessary to maintain navigable conditions in certain waterways. If dredging must be conducted in a location where hunting occurs, restrictions including a minimum buffer zone must be implemented to prevent boaters from entering the area until dredging is complete for the safety of both the hunters and dredging operators. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Physical occupation of space; hunting should be prohibited from occurring in the areas around active dredging operations	Adherence to dredging windows; seasonal conflicts restrictions to avoid users conflict	Evaluate recreational use data to identify areas heavily utilized by boating avoid disrupting natural processes within these sites; If dredging must be conducted in a location where hunting occurs, restrictions including a minimum buffer zone must be implemented to prevent boaters from entering the area until dredging is complete	Coordinate with stakeholders to limit or postpone dredging activities in heavily utilized hunting areas during peak hunting seasons, issue local notice to mariners identifying areas in which dredging will be conducted, When placing sediments for beneficial reuse coordinate with resource agencies to minimize the effect on periods of peak production for habitat use (spawning, nesting etc); Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.
	Ports	N	Conflicts with port operations, navigational safety, human safety and port security preclude hunting from occurring in ports. Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Port operations; navigational and human safety; port security	Seasonal hunting	Hunting areas should not be established near areas that are heavily utilized by port activities	Coordination with the US Coast Guard and NOAA OCS is necessary to establish and map limits or restriction areas and to ensure placement of proper aids-to-navigation to reduce conflict. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.

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	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Vessels	N	Hunting is incompatible in areas where vessels are operating due to increase risk to human safety, damage to vessels, and security concerns. Hunting should be prohibited in areas of high vessel traffic. Vessel operators should avoid areas designated for hunting activities during hunting seasons. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Competition for space; increase risk to human safety, damage to vessels and security concerns	Seasonal hunting; presence of vessels	Hunting areas should not be established near areas that are heavily utilized by vessels	Hunting should be prohibited in areas of high vessel traffic. Vessel operators should avoid areas designated for hunting activities during hunting seasons. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.
	Anchorages	Conditionally Compatible	Hunting is conditionally compatible within anchorages depending on the presence of vessels. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Create de-facto exclusion zone and have higher occurrence of spills	Seasonal hunting; presence of vessels within or going to an anchorage	Avoid establishing new anchorages in designated hunting areas	Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.
	Vessel Routes/ATON	Y	Boats involved in hunting activity rely on established vessels routes with properly placed aids to navigation for safe passage. Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Hunting boats rely on vessel routes and ATON for safe navigation to hunting areas	Seasonal hunting	ATON should be established in areas visible to all users; Try to avoid constructing new ATONs during active hunting	Boaters should adhere to all navigation safety rules to ensure safety of themselves and those around them. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.

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	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Security	Conditionally Compatible	Hunting is conditionally compatible within Security Areas depending on the type and extent of restrictions placed on those areas. However, due to the human and security risks involved, hunters should avoid using these areas. Security zones are established to restrict vessel operations in order to protect users from potential danger in the area or a facility from potential external danger. Security areas may have permanent exclusion zones restricting all access and uses while others may have partial restrictions limiting access or use during certain times of day/year or when other activities are occurring. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Exclusion areas	Entering a security zone without permission could initiate investigations of "suspicious items," which could impact other activities within the area*	Avoid siting designated hunting areas within security zones	Hunters should avoid areas with security restrictions due to potential risks associated within security zones; exclusion zones to limit or restrict access; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.
Fishing & Recreation	Fishing Gear (Pelagic)	Conditionally Compatible	Fishing Gear (pelagic) and hunting are conditionally compatible although conducting these activities in the same time and place should be avoided due to increased risk to human safety and navigation safety. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels. Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.	Competition for space; improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels	Seasonal hunting	Avoid siting designated hunting areas within important fishing areas	Users of pelagic fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.

HUNTING CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Fishing Gear (Bottom)	Conditionally Compatible	Fishing Gear (bottom) and hunting are conditionally compatible although conducting these activities in the same time and place should be avoided due to increased risk to human safety and navigation safety. Conflicts can arise when improperly deployed or derelict fishing gear creates obstacles or entanglement hazards to hunting vessels. Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes). Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear. Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations. Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations.	Competition for space; gear (set or derelict) can create obstacles or entanglement hazards that would impede navigation safety; exclusion zones; impacts from hunting	Seasonal hunting	Avoid siting designated hunting areas within important fishing areas	Users of bottom fishing gear must follow all permitting and safety agency regulations. Fishing gear should avoid being deployed in high boat traffic areas (e.g. navigation routes); Safe operating distance should be maintained between hunters and boats/vessels operating with deployed fishing gear; Efforts should be made to collect derelict fishing gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity; Those engaging in activities utilizing pelagic fishing gear must adhere to all regulations governing those activities, including boat and navigation safety, maintaining a level of awareness to their surroundings to avoid or minimize conflicts with users within the area, and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity.
	Aquaculture	N	Aquaculture and hunting are incompatible in the same location. Conflicts can arise when gear (set or derelict) creates obstacles or entanglement hazards that impede navigation safety. The siting of aquaculture areas should be coordinated to avoid or minimize impacts to navigation routes or designated hunting areas. Safe operating distance should be maintained between boats and aquaculture facilities. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program. Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters and adhere to navigation safety regulations. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations. Non-toxic-shot, as approved by the USFWS, is	Physical occupation of the same space at the same time ; gear (set or derelict) can create obstacles or entanglement hazards that would impede navigation safety; exclusion zones; impacts from hunting	May have a greater impact during hunting seasons; during storms increased potential damage to structures, resulting in floating debris - site location dependent; Vessels directly associated with aquaculture activities	Should not interfere with public use/enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by federal state or municipal government; must be at least 30 m from the edge of the approach channel to a small craft harbor; sites are generally located 1,500-2000 feet offshore to minimize conflict. Avoid siting aquaculture facilities within designated hunting areas.	Proper navigation aids; vessel traffic is allowed over lease sites located in water depths greater than 5 feet; lease sites will not be approved if it "unreasonably" restricts access or obstruct access to upland properties, channels, creeks, marinas and docks; commercial and recreational fishing is allowed over on-bottom shellfish leases if it does not interfere with aquaculture activity. Efforts should be made to collect derelict aquaculture gear, either by the owner of the gear at the time it becomes detached or by a resource agency through a derelict gear clean-up program; Those engaging in aquaculture activities must adhere to all regulations governing those activities, including boat and navigation safety and obtain all necessary licenses and permits in accordance with state and federal regulations governing this activity; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety

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			required for all waterfowl hunting within the State of Delaware.				education to operate boats in Delaware Waters and adhere to navigation safety regulations.
	Swimming/ Diving	Conditionally Compatible	Swimming and Diving and Hunting are conditionally compatible in the same areas as these activities generally are not expected to occur at the same time during the year. Swimming and Diving should be avoided in areas where active hunting is occurring due to risks to human safety. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity. Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.	Physical occupation of the same space at the same time (competition)	Seasonal hunting; possible increase of boat traffic in popular hunting areas	Designation of additional hunting areas should consider areas used for surface water sport activities to avoid navigational risks.	Swimming and Diving should be avoided in areas where active hunting is occurring due to risks to human safety; Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity; Vessels engaging in diver operations must deploy a Diver Down Flag, per US Coast Guard regulations, and other vessels must maintain a slow wake within a 100 ft buffer of the flag.
	Surface Water Sports	Conditionally Compatible	Hunting and Surface Water Sports are conditionally compatible activities. The hunting season does overlap with the end of the recreational season; therefore there is a conflict with potential human and navigational safety. Those engaging in surface water sports should avoid designated hunting areas actively in use and maintain a safe operating distance between themselves and other boaters and hunters to avoid human safety and navigational risks. Hunter should maintain an increased level of awareness to activity occurring around. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Physical occupation of the same space at the same time (competition)	Seasonal hunting; possible increase of boat traffic in popular hunting areas	Proper management practices should be employed for designated hunting areas and surface water sport space to avoid navigational risks.	Those engaging in surface water sports should avoid designated hunting areas actively in use and maintain a safe operating distance between themselves and other boaters and hunters to avoid human safety and navigational risks; Hunter should maintain an increased level of awareness to activity occurring around; Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.

HUNTING CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Boating	Conditionally compatible	Hunting and Boating are conditionally compatible activities. Hunters are required to be in boats to engage in this activity. When required by law hunters must remain in those areas designated for this activity; therefore, hunters may be competing for the same space. The hunting season does overlap with the end of the recreational boating season so all boat operators must adhere to boater safety regulations to avoid conflicts. Hunters must also maintain a safe operating distance between themselves and other boaters to avoid human safety and navigational risks. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Physical occupation of the same space at the same time (competition)	Seasonal hunting; possible increase of boat traffic in popular hunting areas	Proper management practices should be employed for designated hunting areas and recreational boating space to avoid navigational risks.	When required by law hunters must remain in those areas designated for this activity; therefore, hunters be competing for the same space; The hunting season does overlap with the end of the recreational boating season so all boat operators must adhere to boater safety regulations to avoid conflicts; Hunters must also maintain a safe operating distance between themselves and other boaters to avoid human safety and navigational risks; Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot; All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters; Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.
	Hunting	Conditionally Compatible	Hunting is conditionally compatible with other Hunting activities. When required by law hunters must remain in those areas designated for this activity; therefore, hunters be competing for the same space. Hunters must maintain a safe operating distance between themselves and other hunters to avoid human safety and navigational risks. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.	Physical occupation of the same space at the same time (competition)	Seasonal hunting		When required by law hunters must remain in those areas designated for this activity to minimize the competition for space; Hunters must maintain a safe operating distance between themselves and other hunters to avoid human safety and navigational risks. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot. All persons born on or after January 1, 1978 must successfully complete and obtain a certificate of boating safety education to operate boats in Delaware Waters. Hunters must obtain all necessary licenses and/or stamps and adhere to state and federal regulations governing this activity.
Habitat & Organisms	Air	Conditionally Compatible	The compatibility of hunting activities with Air (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by hunters. Hunters must follow the regulations set forth; avoiding unlawful impacts to those organisms protected by said regulations, and follow all safety protocols when actively hunting in areas designated for such activities. Air quality impacts are minimal but all vessel and firearm operation protocols should be adhered to in order avoid or reduce unnecessary pollution. Shot carries beyond the lethal range; duck hunters should use extreme caution when selecting the direction they shoot.	Hunters should utilize designated hunting areas.	Seasonal hunting; air quality impacts from boats	Proper management practices should be employed	Hunters must follow the regulations set forth, avoiding unlawful impacts to those organisms protected by said regulations, and follow all safety protocols when actively hunting in areas designated for such activities; vessel and firearm operation protocols should be adhered to in order avoid or reduce unnecessary pollution.

HUNTING CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Water	Conditionally Compatible	The compatibility of hunting activities with Water (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by hunters. Hunters must follow the regulations set forth; avoiding unlawful impacts to those organisms protected by said regulations, and follow all safety protocols when actively hunting in areas designated for such activities. Impacts to the water habitat are minimal but all vessel and firearm operation protocols should be adhered to in order avoid or reduce unnecessary impacts (i.e. contamination from spills, uncollected trash or debris). Aids to Navigation may create structural habitat that can be used by aquatic species, some of which may become a nuisance. The use of antifouling paint may reduce this, but may also negatively affect water quality. Non-toxic-shot, as approved by the U.S. Fish and Wildlife Service, is required for all waterfowl hunting within the State of Delaware.	Possible unnecessary impacts include contamination from spills, uncollected trash or debris	Seasonal hunting	Proper management practices should be employed	Hunters must follow the regulations set forth, avoiding unlawful impacts to those organisms protected by said regulations, and follow all safety protocols when actively hunting in areas designated for such activities; all vessel and firearm operation protocols should be adhered to in order avoid or reduce unnecessary impacts
	Bottom	Conditionally Compatible	The compatibility of hunting activities with Bottom (habitat and organisms) is dependent upon the application of regulations applied by the resource and permitting agency and the adherence to those regulations by hunters. Hunters must follow the regulations set forth; avoiding unlawful impacts to those organisms protected by said regulations, and follow all safety protocols when actively hunting in areas designated for such activities. Impacts to the benthic habitat are minimal but all vessel and firearm operation protocols should be adhered to in order to avoid or reduce unnecessary impacts (i.e. improper anchoring, running aground, prop wash, firing unnecessarily into benthos).	Improper anchoring, running aground, prop wash and firing unnecessarily into benthos could impact benthic habitat	Seasonal hunting;	Proper management practices should be employed	Hunters must follow the regulations set forth, avoiding unlawful impacts to those organisms protected by said regulations, and follow all safety protocols when actively hunting in areas designated for such activities; all vessel and firearm operation protocols should be adhered to in order avoid or reduce unnecessary impacts
Resources	Cultural/Historical	Conditionally Compatible	Activities associated with hunting should not impact cultural or historic resources if proper management practices are employed and state and federal regulations for hunting are followed. Hunting should be limited to those lands designated by the state or federal government for such activity or on private property where the landowner has given permission for such activity. Hunting should not be permitted in those areas where damage to cultural or historic resources may occur. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware.	Hunting should be limited to lands designated by the state or federal government for such activity or on private property where the landowner has given permission for hunting	Seasonal hunting	Proper management practices should be employed	Hunting should be not be permitted in those areas where damage to cultural or historic resources may occur; All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware.

HUNTING CONSIDERATIONS							
	Subcategory	**Compatible (Y/N)**		**Potential Spatial Considerations**	**Potential Temporal Considerations**	**Examples of Siting Standards**	**Examples of Compensation/Mitigation/Conditions**
	Viewscape	Conditionally Compatible	Impacts to the viewscape are minimal in nature and may consist of semi-permanent to permanent features such as hunting blinds or temporary features such as vessels utilized by hunters. Hunting should be limited to those lands designated by the state or federal government for such activity or on private property where the landowner has given permission for such activity. To reduce impacts to the viewscape, public land managers may coordinate with stakeholders to determine the level of the impact and potentially modify the positioning of hunting features, or require the use of portable hunting feature to minimize the visual impact. Hunters on private property or property owners on which hunting occurs, may require the dismantling of hunting blinds and associated features during non-hunting seasons. All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware.	Hunting should be limited to lands designated by the state or federal government for such activity or on private property where the landowner has given permission for hunting	Seasonal hunting, hunting blinds or temporary features such as vessels utilized by hunters.	Determine the level of the impact and potentially modify the positioning of hunting features	To reduce impacts to the viewscape, public land managers may coordinate with stakeholders to determine the level of the impact and potentially modify the positioning of hunting features, or require the use of portable hunting feature to minimize the visual impact; All hunters must obey all applicable state and federal regulations and guidelines when hunting in Delaware.