Comprehensive Wildlife Conservation Strategy for Florida
Habitat Categories

Descriptions of Vegetation and Land Cover Types –Terrestrial Habitat Categories (23)

1. **Scrub:** This community occurs on areas of deep, well-washed, sterile sands. It is a xeric community, temperate or subtropical. Xeric oak scrub is a xeric hardwood community typically consisting of clumped patches of low growing oaks interspersed with bare areas of white sand. The xeric oak scrub community is dominated by myrtle oak, Chapman's oak, sand-live oak, scrub holly, scrub plum, scrub hickory, rosemary, and saw palmetto. Sand pine scrub occurs on extremely well drained, sorted, sterile sands deposited along former shorelines and islands of ancient seas. This xeric plant community is dominated by an overstory of sand pine and has an understory of myrtle oak, Chapman's oak, sand-live oak, and scrub holly. Ground cover is usually sparse to absent, especially in mature stands, and rosemary and lichens occur in some open areas.

   Florida Natural Areas Inventory (FNAI) community type - Scrub

2. **Sandhill:** Sandhill communities occur in areas of rolling terrain on deep, well-drained, white to yellow, sterile sands. This xeric community is dominated by an overstory of scattered longleaf pine, along with an understory of turkey oak and bluejack oak. The park-like ground cover consists of various grasses and herbs, including wiregrass, partridge pea, beggars tick, milk pea, queen's delight, and others.

   FNAI - Sandhill

3. **Natural Pinelands:** This category includes all natural pine forests, excluding pine rocklands and sandhill (separate categories), and sand pine scrub (see Scrub category). Natural pine forests include mesic and hydric pine flatwoods and scrubby flatwoods. Pine flatwoods occur on flat sandy terrain where the overstory is characterized by longleaf pine, slash pine, or pond pine. Generally, flatwoods dominated by longleaf pine occur on well-drained sites, while pond pine is found in poorly drained areas, and slash pine occupies intermediate or moderately moist areas. The understory and ground cover within these three communities are somewhat similar and include several common species such as saw palmetto, gallberry, wax myrtle, and a wide variety of grasses and herbs. Generally wiregrass and runner oak dominate longleaf pine sites; fetterbush and bay trees are found in pond pine areas, while saw palmetto, gallberry, and rusty lyonia occupy slash pine flatwoods sites. Cypress domes, bayheads, titi swamps, and freshwater marshes are commonly interspersed in isolated depressions throughout this community type. Scrubby flatwoods is another pineland type that occurs on drier ridges, and on or near old coastal dunes. Longleaf pine or slash pine dominates the overstory, whereas the ground cover is similar to the xeric oak scrub community.

   FNAI - Mesic flatwoods, Scrubby flatwoods, Wet flatwoods, Upland pine forest

4. **Coastal Strand:** Coastal strand occurs on well-drained sandy soils and typically includes the zoned vegetation of the upper beach, nearby dunes, or on coastal rock formations. This community generally occurs in a long, narrow band parallel to the open waters of the Atlantic Ocean or Gulf of Mexico, and along the shores of some saline bays or sounds in both north and south Florida. This community occupies areas formed along high-energy shorelines, and is strongly affected by wind, waves, and salt spray. Vegetation within this community typically consists of low growing vines, grasses, and herbaceous plants with very few small trees or large shrubs. Pioneer or early successional herbaceous vegetation characterizes the foredune and upper beach, and a gradual change to woody plant species occurs in more protected areas landward. Typical plant species include beach morning glory, railroad vine, sea oats, saw palmetto, Spanish bayonet, yaupon holly, wax myrtle, along with sea grape, cocoplum, and other tropicals in southern Florida. The coastal strand community only includes the zone of early successional vegetation that lies between the upper beach, and more highly developed communities landward.

   FNAI - Beach dune, Coastal berm, Coastal grassland, Coastal rock barren, Coastal strand

5. **Tropical Hardwood Hammock:** These upland hardwood forests occur in extreme south Florida and are characterized by tree and shrub species on the northern edge of a range that extends southward into the Caribbean. These communities are sparsely distributed along coastal uplands south of a line from about Vero Beach on the Atlantic coast to Sarasota on the Gulf coast. They occur on many tree islands in the Everglades and on uplands throughout the Florida Keys. This cold-intolerant tropical community has very high plant species diversity, sometimes containing over 35 species of trees and about 65 species of shrubs. Characteristic tropical plants include strangler fig, gumbo-limbo, mastic, bustic, lancewood, ironwoods, poisonwood, pigeon plum, Jamaica dogwood, and Bahama lysiloma. Live oak and cabbage palm are also sometimes found within this community. Tropical hammocks in the Florida Keys may also contain several plants, including lignum vitae, mahogany, thatch palms, and manchineel, which are extremely rare within the United States.

   FNAI – Rockland hammock

6. **Beach / Surf Zone:** This habitat category spans the transition zone between terrestrial and marine systems. The upland and intertidal portions of this habitat category consists of barren land with little or no vegetation. Intertidal and shallow subtidal portions of this habitat category are constantly affected by wave and tidal action. This habitat category includes areas of dune sands and other areas of bare sands along the coast.

   FNAI - Beach dune

7. **Dry Prairie:** Dry prairies are large native grass and shrublands occurring on very flat terrain interspersed with scattered cypress domes and strands, bayheads, isolated freshwater marshes, and hardwood hammocks. This community is characterized by many species of grasses, sedges, herbs, and shrubs, including saw palmetto, fetterbush, staggerbush, tar flower, gallberry, blueberry, wiregrass, carpet grasses, and various bluestems. The largest areas of these

treeless plains historically occurred just north of Lake Okeechobee. In central and south Florida, palmetto prairies, which consist of former pine flatwoods where the overstory trees have been thinned or removed, are also included in this category. These sites contain highly scattered pines that cover less than 10 to 15 percent of an area.

FNAI community - Dry prairie

8. **Hardwood Hammock and Forest:** This class includes the major upland hardwood associations that occur statewide on fairly rich sandy soils. Variations in species composition and the local or spatial distributions of these communities are due in part to differences in soil moisture regimes, soil type, and geographic location within the state. Mesic and xeric variations are included within this association.

   The mesic hammock community represents the climax vegetation type within many areas of northern and central Florida. Characteristic species in the extreme north include American beech, southern magnolia, Shumard oak, white oak, mockernut hickory, pignut hickory, sourgum, basswood, white ash, mulberry, and spruce pine. Mesic hammocks of the peninsula are less diverse due to the absence of hardwood species that are adapted to more northerly climates, and are characterized by laurel oak, hop hornbeam, blue beech, sweetgum, cabbage palm, American holly, and southern magnolia.

   Xeric hammocks occur on deep, well-drained, sandy soils where fire has been absent for long periods of time. These open, dry hammocks contain live oak, sand-live oak, bluejack oak, blackjack oak, southern red oak, sand-post oak, and pignut hickory.

   Also included in this category is cabbage palm-live oak hammocks. This class is characterized by cabbage palms and live oaks occurring in small clumps within prairie communities. These hammocks typically have an open understory which may include such species as wax myrtle, water oak, and saw palmetto. Cabbage palm-live oak hammocks are also often found bordering large lakes and rivers, and are distributed throughout the prairie region of south central Florida and extend northward in the St. John's River basin. Cabbage palms often form a fringe around hardwood “islands” located within improved pastures.

   FNAI - Xeric hammock, Mesic hammock, Maritime hammock, Slope forest, Prairie hammock, Upland hardwood forest

9. **Mixed Hardwood-Pine Forest:** This community is the southern extension of the Piedmont southern mixed hardwoods, and occurs mainly on the clay soils on the northern Panhandle. Younger stands may be predominantly pines, whereas a complex of various hardwoods become co-dominants as the system matures over time through plant succession. The overstory consists of shortleaf and loblolly pine, American beech, mockernut hickory, southern red oak, water oak, American holly, and dogwood.

   Also included in this category are other upland forests that occur statewide and contain a mixture of conifers and hardwoods as the co-dominant overstory component. These communities contain longleaf pine, slash pine, and loblolly pine in mixed association with live oak, laurel oak, and

water oak, together with other hardwood species characteristic of the upland hardwood hammocks and forests class.

FNAI - Upland mixed forest

10. **Hydric Hammock:** Hydric hammocks occur on soils that are poorly drained or have high water tables. This association is a still-water wetland, flooded less frequently and for shorter periods of time than mixed hardwood and cypress swamps. Outcrops of limestone are common in the Gulf coastal area. Typical plant species include laurel oak, live oak, cabbage palm, southern red cedar, and sweetgum. Canopy closure is typically 75 to 90 percent. The sub-canopy layer and ground layer vegetation is highly variable between sites. Wax myrtle is the most frequent shrub in hydric hammock. Other shrubs include yaupon, dahoon, and swamp dogwood. Ground cover may be absent or consist of a dense growth of ferns, sedges, grasses, and greenbriars. Sites are usually between mesic hammocks or pine flatwoods and river swamp, wet prairie, or marsh. This hammock type is found in a narrow band along parts of the Gulf coast and along the St. Johns River where they often extend to the edge of coastal salt marshes.

    FNAI - Hydric hammock

11. **Grassland / Pastureland:** These are upland communities where the predominant vegetative cover is very low growing grasses and forbs. This very early successional category includes all sites with herbaceous vegetation during the time period between bare ground and the shrub and brush stage. It also includes areas that may be maintained in this stage through periodic mowing, such as along dikes or levees.

    Also included in this category are lands that are classified as improved, unimproved, and woodland pasture. Normally, unimproved pastures are not managed with brush control or fertilizer application. Improved lands include those that have been cleared, tilled, reseeded with a specific grass types, and periodically improved with brush control and fertilizer application. This category includes cleared land without major stands of trees and brush where native grasses have been allowed to develop.

    FNAI – No type

12. **Urban / Developed:** This category includes unvegetated areas such as roads, residential and commercial buildings, parking lots, and other high impact developed uses. Lower impact developed areas within urbanized areas are also included. These areas may or may not be vegetated and include land uses such as lawns, golf courses, road shoulders, grassy areas surrounding places such as airports, park facilities, etc. Many secondary roads, such as forest roads, are included in this category.

    FNAI - No type

13. **Disturbed/Transitional:** This category includes lands which have been changed primarily due to human activities. Shrub and brushland is an association that includes a variety of situations where natural upland community types have been recently disturbed through clear-cutting commercial pinelands, land clearing, or fire and are recovering through natural successional processes. This category could be characterized as an early condition of old-field succession, and various shrubs, tree saplings, and lesser amounts of grasses and herbs dominate the community. Common species include wax myrtle, saltbush, sumac, elderberry, saw palmetto, blackberry, gallberry, fetterbush, staggerbush, broomsedge, and dog fennel, together with oak, pine, and other tree seedlings or saplings.

    Also included in this category are areas of bare soil representing recent timber cutting operations, areas devoid of vegetation as a consequence of recent fires, natural areas of exposed bare soil (e.g., sandy areas within xeric communities), or bare soil exposed due to vegetation removal for unknown reasons.

    Additionally, upland and wetland areas dominated by non-native trees that were planted or have escaped and invaded native plant communities are included in this c ategory. These exotics include melaleuca, Australian pine, Brazilian pepper, and eucalyptus.

    FNAI - No type

14. **Agriculture:** This category includes lands which are planted to sugar cane, citrus groves, row crops (e.g., corn, tomatoes, potatoes, cotton, beans), field crops (e.g., hay and grasses), and other agricultural uses (e.g., peach orchards, pecan and avocado groves, nurseries and vineyards, horse and dairy farms, fallow cropland).

    FNAI - No type

15. **Industrial Pinelands:** Commercial pine plantations are included in this category. These are almost exclusively pine forests artificially generated by planting and are characterized by high numbers of trees per acre. This category includes sites predominately planted to slash pine, although longleaf pine and loblolly pine tracts also occur. Also included in this category are sand pine plantations, which have been planted on severely site-prepared sandhill sites in the north Florida panhandle.

    FNAI - No type

16. **Pine Rocklands:** A pine flatwoods forest type that occurs in extreme south Florida on rocklands with exposed limestone substrate. The overstory is the south Florida variety of slash pine, and tropical hardwood species occur in the understory.

    FNAI - Pine Rocklands

17. **Terrestrial Cave:** Natural chamber overlain by the earth's crust and characterized by climatic stability. Areas lacking standing water, but including interstitial areas above standing water such as fissures in the ceiling of caves. Often inhabited by bats and other terrestrial vertebrates and invertebrates.

    FNAI – Terrestrial cave

18. **Cypress Swamp:** These regularly inundated wetlands form a forested border along large rivers, creeks, and lakes, or occur in depressions as circular domes or linear strands. These communities are strongly dominated by either bald cypress or pond cypress, with very low numbers of scattered black gum, red maple, and sweetbay. Understory and ground cover are usually sparse due to frequent flooding but sometimes include such species as buttonbush, lizard's-tail, and various ferns.

    FNAI - Strand swamp, Dome swamp

19. **Hardwood Swamp / Mixed Wetland Forest:** These wooded wetland communities are composed of either pure stands of hardwoods, or occur as a mixture of hardwoods and cypress where hardwoods achieve dominance. This association of wetland-adapted trees occurs throughout the state on organic soils and forms the forested floodplains of non-alluvial rivers, creeks, and broad lake basins. Tree species include a mixed overstory containing black gum, water tupelo, bald cypress, dahoon holly, red maple, swamp ash, cabbage palm, and sweetbay. Also included in this category are mixed wetland forest communities in which neither hardwoods nor conifers achieve dominance. The mix can include hardwoods with pine or cypress and can represent a mixed hydric site or a transition between hardwoods and conifers on hydric/mesic sites.

    FNAI - Bottomland forest, Basin swamp

20. **Freshwater Marsh and Wet Prairie:** These wetland communities are dominated by a wide assortment of herbaceous plant species growing on sand, clay, marl, and organic soils in areas of variable water depths and inundation regimes. Generally, freshwater marshes occur in deeper, more strongly inundated situations and are characterized by tall emergents and floating-leaved species. Freshwater marshes occur within flatwoods depressions, along broad, shallow lake and river shorelines, and scattered in open areas within hardwood and cypress swamps. Also, other portions of freshwater lakes, rivers, and canals that are dominated by floating-leaved plants such as lotus, spatterdock, duck weed, and water hyacinths are included in this category. Freshwater marshes are common features of many river deltas, such as the Escambia, Apalachicola and Choctawhatchee, where these rivers discharge into estuaries. Wet prairies commonly occur in shallow, periodically inundated areas and are usually dominated by aquatic grasses, sedges, and their associates. Wet prairies occur as scattered, shallow depressions within dry prairie areas and on marl prairie areas in south Florida. Also included in this category are areas in Southwest Florida with scattered dwarf cypress having less than 20 percent canopy coverage, and a dense ground cover of freshwater marsh plants. Various combinations of pickerel weed, sawgrass, maidencane, arrowhead, fire flag, cattail, spike rush, bullrush, white water lily, water shield, and

various sedges dominate freshwater marshes and wet prairies. Many marsh or wet prairie types, such as sawgrass marsh or maidencane prairie, have been described and so-named based on their dominant plant species.

(FNAI - Basin marsh, Coastal interdunal swale, Depression marsh, Marl prairie, Wet prairie, Floodplain marsh, Slough, Swale)

21. **Bottomland Hardwood Forest:** These wetland forests are composed of a diverse assortment of hydric hardwoods which occur on the rich alluvial soils of silt and clay deposited along several Panhandle rivers including the Apalachicola, Choctawhatchee, and Escambia. These communities are characterized by an overstory that includes water hickory, overcup oak, swamp chestnut oak, river birch, American sycamore, red maple, Florida elm, bald cypress, blue beech, and swamp ash.

FNAI - Floodplain forest, Floodplain swamp, Freshwater tidal swamp

22. **Shrub Swamp:** Shrub swamps are wetland communities dominated by dense, low-growing, woody shrubs or small trees. Shrub swamps are usually characteristic of wetland areas that are experiencing environmental change, and are early to mid-successional in species complement and structure. These changes are a result of natural or man-induced perturbations due to increased or decreased hydroperiod, fire, clear cutting or land clearing, and siltation. Shrub swamps statewide may be dominated by one species, such as willow, or an array of opportunistic plants may form a dense, low canopy. Common species include willow, wax myrtle, primrose willow, buttonbush, and saplings of red maple, sweetbay, black gum, and other hydric tree species indicative of wooded wetlands. In northern Florida, some shrub swamps are a fire-maintained subclimax of bay swamps. These dense shrubby areas are dominated by black titi, swamp cyrilla, fetterbush, sweet pepperbush, doghobble, large gallberry, and myrtle-leaf holly.

FNAI - No type

23. **Bay Swamp:** These hardwood swamps contain broadleaf evergreen trees that occur in shallow, stagnant drainages or depressions often found within pine flatwoods, or at the base of sandy ridges where seepage maintains constantly wet soils. The soils, which are usually covered by an abundant layer of leaf litter, are mostly acidic peat or muck that remains saturated for long periods but over which little water level fluctuation occurs. Overstory trees within bayheads are dominated by sweetbay, swamp bay, and loblolly bay. Depending on the location within the state, other species including pond pine, slash pine, blackgum, cypress, and Atlantic white cedar can occur as scattered individuals, but bay trees dominate the canopy and characterize the community. Understory and ground cover species may include dahoon holly, wax myrtle, fetterbush, greenbriar, royal fern, cinnamon fern, and sphagnum moss.

FNAI - Baygall, Bog

Descriptions of Vegetation and Land Cover Types – Freshwater Habitat Categories (13)

1. **Spring and Spring Run:** Typically have high water clarity, low sedimentation, stable channels, with minimal changes in water level or flow, and a direct outflow from the limestone aquifer. Usually less than 40 feet wide. Examples include, Silver Springs, Manatee Springs, Spring Creek, Blue Springs, or Rainbow Springs.

   FNAI – Spring-run stream

2. **Seepage / Steephead Stream:** Typically have sand bottoms with groundwater inflow. Classic Florida examples are found in the Apalachicola drainage, but also occur elsewhere in the state. Seepage / Steephead streams are usually less than 40 feet wide. This category includes seepage streams in ravines, and the hillside pitcher plant bogs on Eglin Air Force Base and Blackwater State Forest found at the head of or along seepage streams.

   FNAI – Seepage stream, Seepage slope

3. **Large Alluvial Stream:** Characterized as having meandering channels, high sediment or bed loads, large natural fluctuations in flows, and a mix of sand bottom, sand and gravel, and areas of bedrock or shoals, minimal vegetation in the channel with vegetation mostly confined to channel edges or backwaters, typically (in Florida) circumneutral in pH. For example, Escambia, Choctawhatchee, or Apalachicola rivers.

   FNAI – Alluvial stream

4. **Large Calcareous Stream:** High pH, high carbonate, typically with some limestone exposed, moderate flow, cool, clear water, often, but not always intermixed with dense aquatic vegetation. Usually larger than 40 feet wide. For example, Suwannee (middle), Ocklawaha, Santa Fe (lower), Chipola, Withlacoochee (north), or St. Marks, Peace rivers.

   FNAI – Spring-run stream

5. **Small Calcareous Stream:** High pH, high carbonate, sand bottom with exposed limestone, typically clear except where draining pinelands or scrub, vegetation primarily along the shorelines. Usually less than 40 feet wide. For example, Holmes Creek, Ichetucknee River, or Econfina Creek**.**

   FNAI – Spring-run stream

6. **Sinkhole Lake:** Typically more than 45 feet deep with direct connection to limestone aquifer. Steep sides, high water clarity, sand or rock substrate.

   FNAI – Sinkhole lake

7. **Small Softwater Stream:** Low pH, low carbonate, water may be stained by tannins and humic acids, typically has sand or silt bottoms with varying amounts of aquatic vegetation, usually with gentle flow. Usually less than 40 ft wide. For example, Big Coldwater Creek, Pine Barren Creek, Big Escambia Creek, Big Sweetwater Creek.

   FNAI – Blackwater stream

8. **Large Softwater Stream:** Low pH, low carbonate, water is often stained by tannins and humic acids, typically with sand bottoms, moderate flow influenced by local rainfall. For example, Blackwater, Wacasassa, Yellow, Perdido, Econfina, Aucilla, Sopchoppy, St. Marys, or Ochlockonee rivers.

   FNAI – Blackwater stream

9. **Sand / Silt-bottomed Lake:** Usually less than 45 feet deep, and little vegetation except at the shorelines. Sandy, silt or organic substrates. Shallow, varying amounts of vegetation with some succession towards swamp conditions.

   FNAI - Clastic upland lakes, Sandhill lakes

10. **Backwater:** Slow moving water, sometimes connected to the main channels of rivers and linked to the floodplains. Some may be isolated on the floodplain during low-water periods and connected during high water. The water is typically dark or turbid, may contain submerged and emergent vegetation near the edges. Backwaters are very characteristic features of Panhandle rivers, such as, the Apalachicola, Choctawhatchee and Escambia.

    FNAI – River floodplain lakes, Swamp lakes

11. **Reservoir / Managed Lake:** Artificial impoundment created by a dam on a flowing stream or any of the above type of lake that are artificially managed lake levels by a structure or dam.

    FNAI - No type

12. **Canal / Ditch:** Man-made structures typically with steep sides and minimal submerged vegetation.

    FNAI - No type

13. **Aquatic Cave:** Cavernicolous area permanently or periodically submerged and often characterized by troglobitic crustaceans and salamanders; including high energy systems which receive large quantities of organic detritus and low energy systems.

    FNAI – Aquatic cave

Descriptions of Vegetation and Land Cover Types – Marine Habitat Categories (13)

1. **Coral Reef:** Hardened substrate formed by reef building corals. May be live coral or relict reefs such as those found off the coast of southeast Florida. Often bedrock is the base for these reefs but the presence of coral or remnant coral on the surface is reason to categorize the dominant habitat as coral reef.

   FNAI - Coral reef

2. **Mangrove Swamp:** These dense, brackish water swamps occur along low-energy shorelines and in protected, tidally influenced bays of southern Florida. This community is composed of freeze-intolerant tree species that are distributed south of a line from Cedar Key on the Gulf coast to St. Augustine on the Atlantic coast. These swamp communities are usually dominated by red, black, and white mangroves that progress in a sere from seaward to landward areas, respectively, while buttonwood trees occur in areas above high tide. Openings and transitional areas in mangrove swamps sometimes contain glasswort, saltwort, and other salt marsh species.

   FNAI – Tidal swamp

3. **Salt Marsh:** These herbaceous and shrubby wetland communities occur statewide in brackish waters along protected low energy estuarine shorelines of the Atlantic and Gulf coasts. The largest continuous areas of salt marsh occur north of the range of mangroves, and border tidal creeks, bays and sounds. Salt marshes are sometimes interspersed within mangrove areas, and also occur as a transition zone between freshwater marshes and mangrove forests such as in the Ten Thousand Islands area along the southwest Florida coast. Plant distribution within salt marshes is largely dependent on the degree of tidal inundation, and many large areas are completely dominated by one species. This category includes transitional or high salt marshes. Generally, smooth cordgrass typically occupies the lowest elevations immediately adjacent to tidal creeks and pools, while black needlerush dominates less frequently inundated zones. The highest elevations form transitional areas characterized by glasswort, saltwort, saltgrass, sea oxeye daisy, marsh elder, and saltbush.

   FNAI – Tidal marsh

4. **Submerged Aquatic Vegetation:** Any combination of seagrasses, oligohaline grasses, attached macroalgae and drift macroalgae that covers 10 to 100 percent of a substrate.

   FNAI – Algal bed, Grass bed, Composite substrate

5. **Coastal Tidal River or Stream:** The freshwater or brackish portion of a river or stream adjacent to an estuary or marine habitat in which the effects of tides causes the rise and fall of water levels. Includes the lower St. Johns River (St. John's Marsh in Brevard County, north).

   FNAI - No type

6. **Tidal Flats:** Areas composed of that portion of the shore environment protected from wave action and primarily composed of sand, mud, or hardbottom areas typically lacking significant plant life (<=10%), and that are often exposed during the low tide.

   FNAI - No type

7. **Bivalve Reef:** Concentrations of sessile mollusks (e.g., oysters), dominated by oysters that attach to hard substrate and with the correct conditions will proliferate allowing the reef to grow.

   FNAI – Mollusk reef

8. **Annelid Reef:** Structures formed from colonies of Sabellariid worm tubes. Commonly found in the intertidal and shallow subtidal zone throughout Florida, these structures are mostly formed on hard substrates. Storm events can break these reef structures, thus changing the extent of the colony at the time of mapping. The reefs also expand as worm larvae settle on the mounds and build additional tubes.

   FNAI – Worm reef

9. **Hardbottom:** This category is characterized by hard substrate composed of exposed bedrock or created through syndepositional cementation of sediment. Sponges and octocorals may be present. This category includes the hardbottom created by relict gastropod reefs (i.e. vermetid reefs) created by a worm-like mollusk of the genus *Petaloconchus*. In Florida, these reefs are only known to be found in shallow waters seaward of the outer islands in the Ten Thousand Islands area of southwest Florida.

   FNAI – Consolidated substrate, Octocoral bed, Sponge bed

10. **Inlets:** Natural and man-made cuts in the shoreline that link coastal and inland water bodies. These features tend to be hot spots of biodiversity and magnets for the recruitment of many fish and invertebrate species. Inlets provide habitat for the settling larvae from coastal areas and provide an emigration conduit for outgoing juveniles. Defined as the subtidal areas within a two kilometer radius of the central part (i.e., throat) of the inlet.

    FNAI - No type

11. **Pelagic:** Open water areas of marine habitat within state waters that extend three nautical miles off of the Florida east coast and nine nautical miles off of the Florida Gulf coast. Maximum depths vary from approximately 30 feet in the Gulf of Mexico to more than 1,000 feet off of the Florida Keys and southeast Florida.

    FNAI - No type

12. **Subtidal Unconsolidated Marine/Estuary Sediments:** Unconsolidated sediments with zero to less than 10 percent colonization by Submerged Aquatic Vegetation (SAV) or corals.

    FNAI – Unconsolidated substrate

13. **Artificial Structure:** This habitat category is characterized by man-made structures that have been placed purposefully or accidentally in the marine or estuarine environment and now serve as habitat for marine/estuarine organisms. This habitat category includes artificial reefs, ship wrecks, piers, rip-rap and other coastal armoring among other man-made structures.

    FNAI - No type