

## **Supporting Information for Non-federally Listed, At-risk Shorebirds**

### **Technical Distinctions Between Seabirds and Shorebirds**

Seabirds feed at sea while shorebirds forage along the shore. Seabirds are colonial nesters, whereas shorebirds are solitary nesters. Shorebirds rely on cryptic nesting behavior and camouflaged eggs and chicks in order to evade predators. Colonial nesters rely on numbers and aggressive mobbing behavior to deter predators. Seabirds have semi-precocious chicks, which although capable of leaving the nest soon after hatching (they can walk and often swim) generally stay in the vicinity of the nest and are fed by the parents. Shorebirds, on the other hand, have precocious chicks (capable of moving around on their own and feeding themselves soon after hatching) which wander widely (+/- 1 mile) and forage with their parents. Thus, a single shorebird family may utilize a variety of habitats along extensive stretches of the beach during the nesting season, and protection of their nesting sites may not adequately protect the chicks during the period between hatching and fledging. Thus, seabirds and shorebirds present different conservation challenges and may require different sets of impact minimization measures.

### **At-risk Seabird and Shorebird Species**

Thirteen (13) species of non-federally listed, at-risk seabirds and shorebirds (collectively referred to as shorebirds in general discussions) were originally proposed for inclusion in a CCAA. Based on the level of threats to their continued survival, they can generally be divided into three tiers.

Tier 1 Species. Species that are listed at the state level.

- Snowy plover (shorebird) – This species is in need of protection and is a likely candidate for future federal listing. It is in serious trouble in Florida with only about 200 nesting pair remaining. The majority of those (155) occur in the panhandle region, with only about 45 pair remaining in the Gulf Region (SW Florida). The snowy plover is an obligate beach nester and a year-round resident. It only occurs on dry white sand, and therefore is much more vulnerable to CCCL activities than other seabirds and shorebirds. Although the snowy plover is more abundant elsewhere, the Florida plovers may represent a distinct population and thus an important genetic unit in the conservation of the species.
- American Oystercatcher (shorebird) – Approximately 400 pair of oystercatchers nest in Florida. However, Florida serves as the winter destination for the entire population along the eastern seaboard. It occurs in all 4 regions, although it is probably least common in the SE Atlantic Region. The oystercatcher depends heavily on man-made habitats, such as spoil islands. Although it is not an obligate beach nester, it does nest on the beach and when it does, there is strong site fidelity.
- Black skimmer (seabird) – There are approximately 2000 nesting pair of black skimmers in Florida, and they are year-round residents in all four HCP regions. Winter migrants are also present. These birds appear to have low nest success, as

they are very sensitive to disturbances (e.g., CCCL activities). They also tend to nest later in the season than other seabirds & shorebirds.

- Least tern (seabird) – There are approximately 12,000 pairs of nesting least terns in Florida. The majority of those are rooftop nesters, with only about 2,000 pairs nesting on the beach. They occur in all four HCP regions. Unlike the other species, the least tern migrates to habitat outside the state for the non-breeding season. Least terns are very opportunistic, adapting to a variety of nesting sites, including disturbed areas and rooftops. Approximately 85% of nesting is on rooftops. This habitat is rapidly diminishing as flat rooftops are being retrofitted. Thus, their conservation depends on the availability of adequate beach nesting sites to compensate for the loss of rooftop habitat. Otherwise population declines could be considerable. This species is the one most likely to come into conflict with people, development, and CCCL activities.

Tier 2 Species. Species not listed at the state level but considered Species of Greatest Conservation Need in Florida.

- Gull-billed tern (seabird) – This species is in greatest need of protection of all the shorebirds, as it is extremely rare in Florida. Although this species does utilize off-beach nesting habitat, it also relies heavily on beaches for nesting and therefore is subject to impact from CCCL activities. It typically nests in colonies with the other terns listed in this tier of species.
- Wilson's Plover (shorebird) – The status of this species is unknown, but because of its on-beach nesting patterns, it is quite vulnerable to impacts from CCCL activities.
- Caspian tern (seabird) – nests in colonies with the other terns listed in this tier of species.
- Royal tern (seabird) – nests in colonies with the other terns listed in this tier of species.
- Sandwich tern (seabird) – nests in colonies with the other terns listed in this tier of species.
- Sanderling (shorebird)

Tier 3 Species. Species neither listed at the state level nor considered Species of Greatest Conservation Need in Florida due to a lack of information regarding population size and trends.

- Black-bellied plover (shorebird)
- Ruddy turnstone (shorebird)
- Willet (shorebird)