

## AVOIDANCE AND MINIMIZATION MEASURES FOR PIPING PLOVERS AND RED KNOTS FOR SHORELINE ACTIVITIES IN LOUISIANA

- Do not disturb foraging or roosting piping plovers or red knots. Survey (conducted by a qualified biologist) the project area (i.e., operational site, access points, travel corridors, staging areas, etc.) for the presence of piping plovers/red knots or optimal habitat features (i.e., inlets, bayside sand and mud flats, tidal pools, and wrack lines). Educate personnel on avoiding those areas being utilized by the birds.
- When piping plovers or red knots are identified, keep vehicle and foot traffic 150 feet from the birds or 10 feet from optimal habitat features (even when birds are not present). Maintain the recommended buffers for the duration of the work activities even if the birds depart or relocate. Follow existing/established travel and access corridors and maintain slow speeds to avoid disturbing birds.
- Stay at least 500 feet or more away from high tide roosting areas, including large flocks of shorebirds when possible, as piping plovers and red knots may occur in mixed flocks. If birds in the area are repeatedly being flushed (i.e., flying away), then you are too close and need to back away.
- Designate access points, staging areas, waste collections areas, and travel corridors away from known foraging and roosting areas and keep all personnel, vehicles, and equipment within those designated corridors to minimize disturbance to birds and beach topographic alterations.
- Limit driving up and down the shoreline to the minimum number of passes needed to accomplish the work in order to minimize disturbance to birds and beach topographic alterations. Keep all personnel, vehicles, and equipment within the designated work area/project footprint and access corridors.
- Use low-pressure tire (10 psi) or tracked vehicles (e.g., ATVs, dozers, etc.) to avoid and minimize beach topographic alterations.
- Do not block major egress points in channels, rivers, passes, and bays to avoid disturbance to natural coastal processes.
- Staging areas and waste collection areas should be located to avoid beaches, dunes, inlets, and ephemeral tidal pools.
- Maintain a clean worksite. Remove all trash and work-related debris on a daily basis.
- Avoid disturbing the wrack line during project work or while traveling to and from the project site. If the wrack line must be crossed by equipment or vehicles to access the project area, then minimize disturbance by gently raking the wrack out of the way to establish a designated travel corridor for crossing the wrack line. Restore the wrack to its original configuration once access across it is no longer needed.
- Avoid disturbing bay side sand and mud flats.
- Avoid impacts to dune systems, both vegetated and non-vegetated, including trampling any dune vegetation. Use existing designated travel and access corridors at all times. If necessary, establish a buffer with flagging from the toe of the slope of the dune to a distance of 10 feet. Where vegetation extends off the dune onto the beach, the buffer should extend 10 from the vegetation.
- Restore beach topography and the wrack line to their natural pre-project conditions.