

# Marbled Murrelet Biology and Conservation

Marbled murrelets are a pigeon-sized seabird that live along the Pacific coast of North America from California to Alaska. They are federally listed as a 'threatened' species in the continental US. Historic and current loss of nesting habitat is considered a primary cause of species decline.

Marbled murrelets nest inland, mainly on platforms in the broad mossy limbs of large conifer trees for the portion of their range south of Kodiak Island, Alaska. In Washington, they have been seen up to 50 miles from marine water.

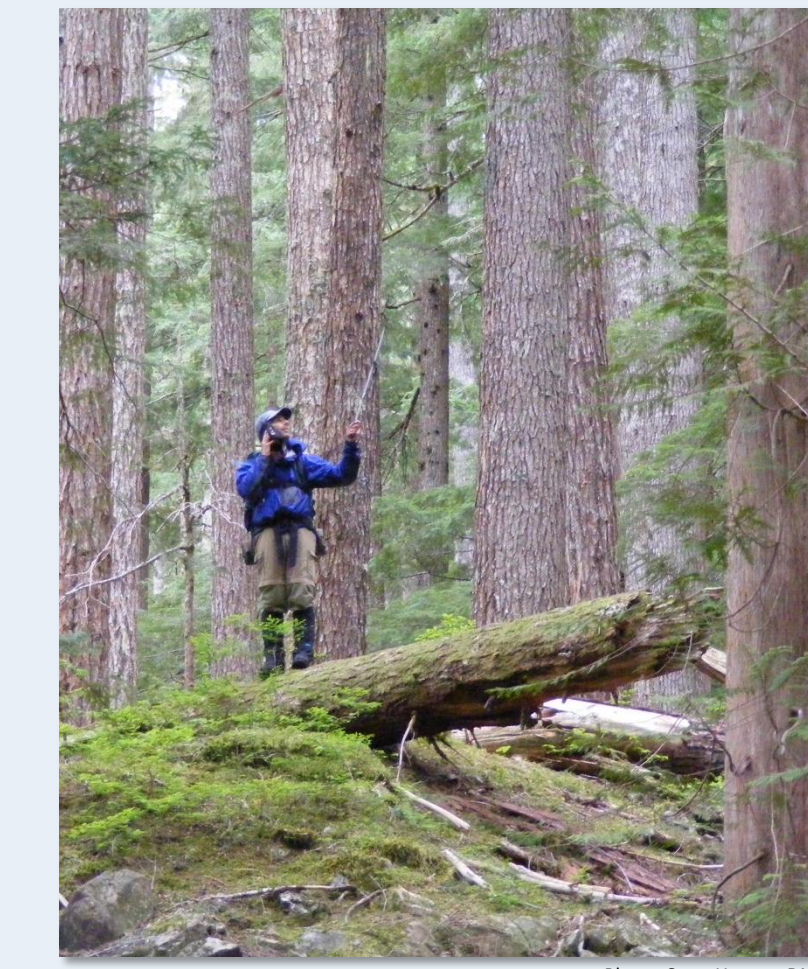
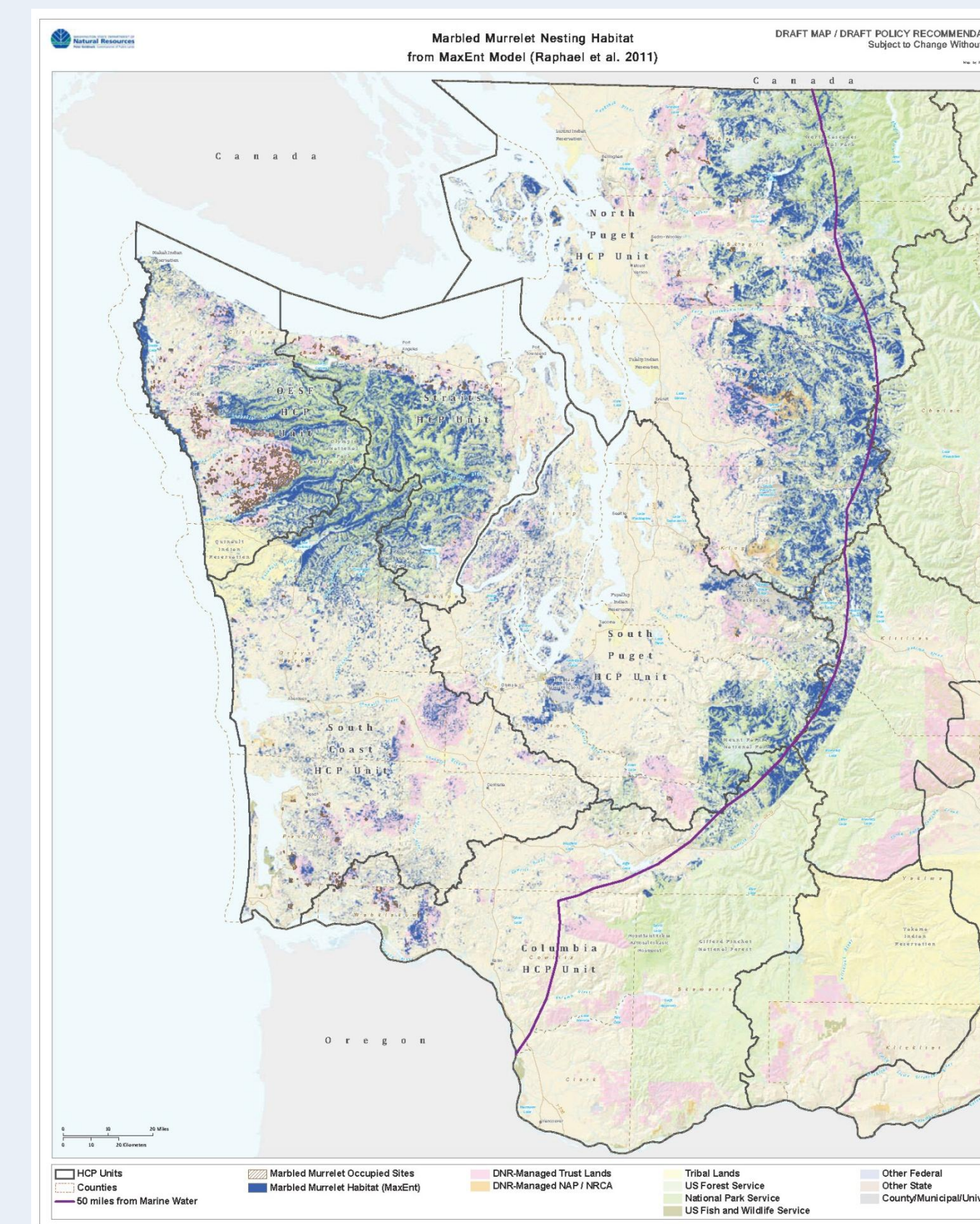
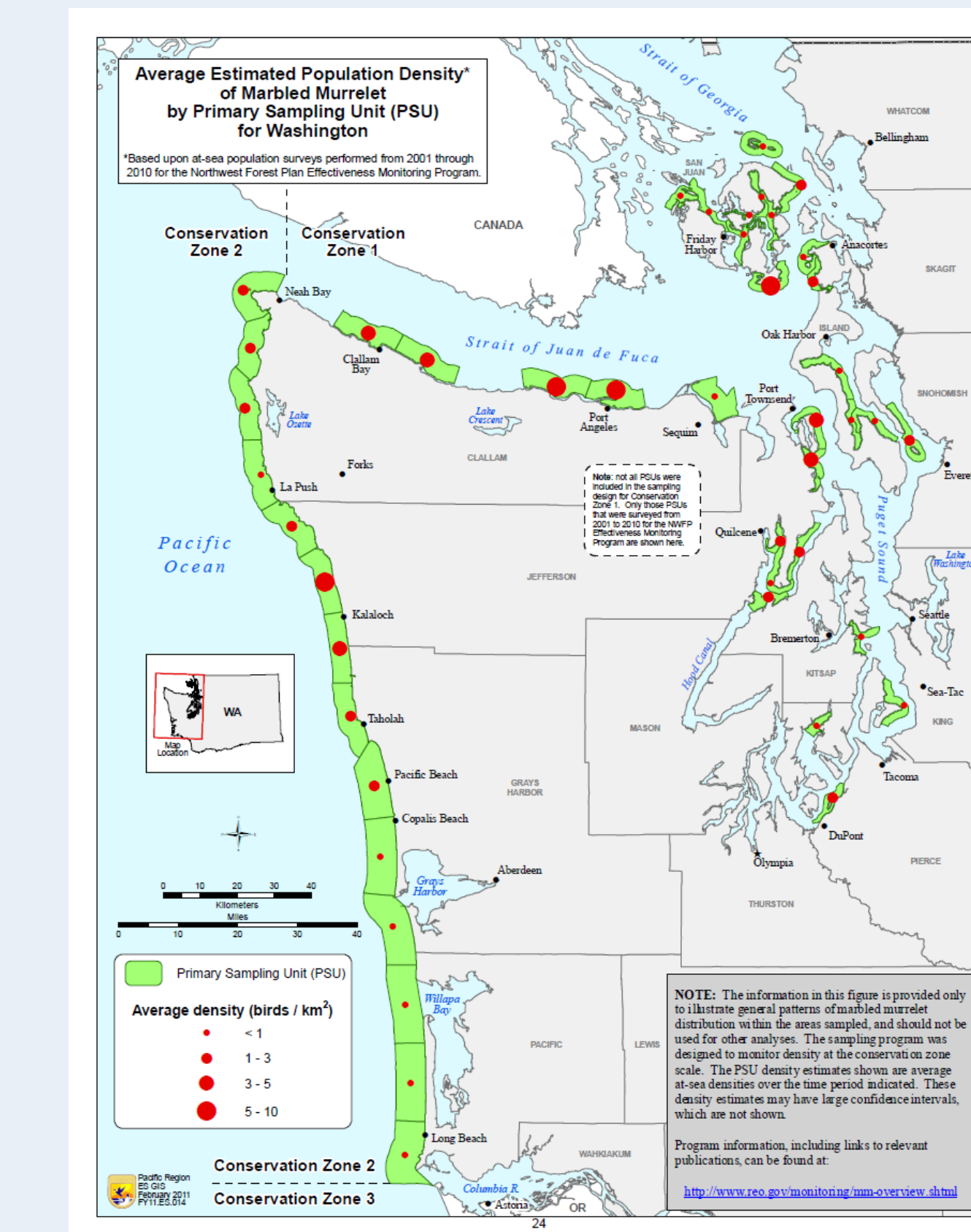
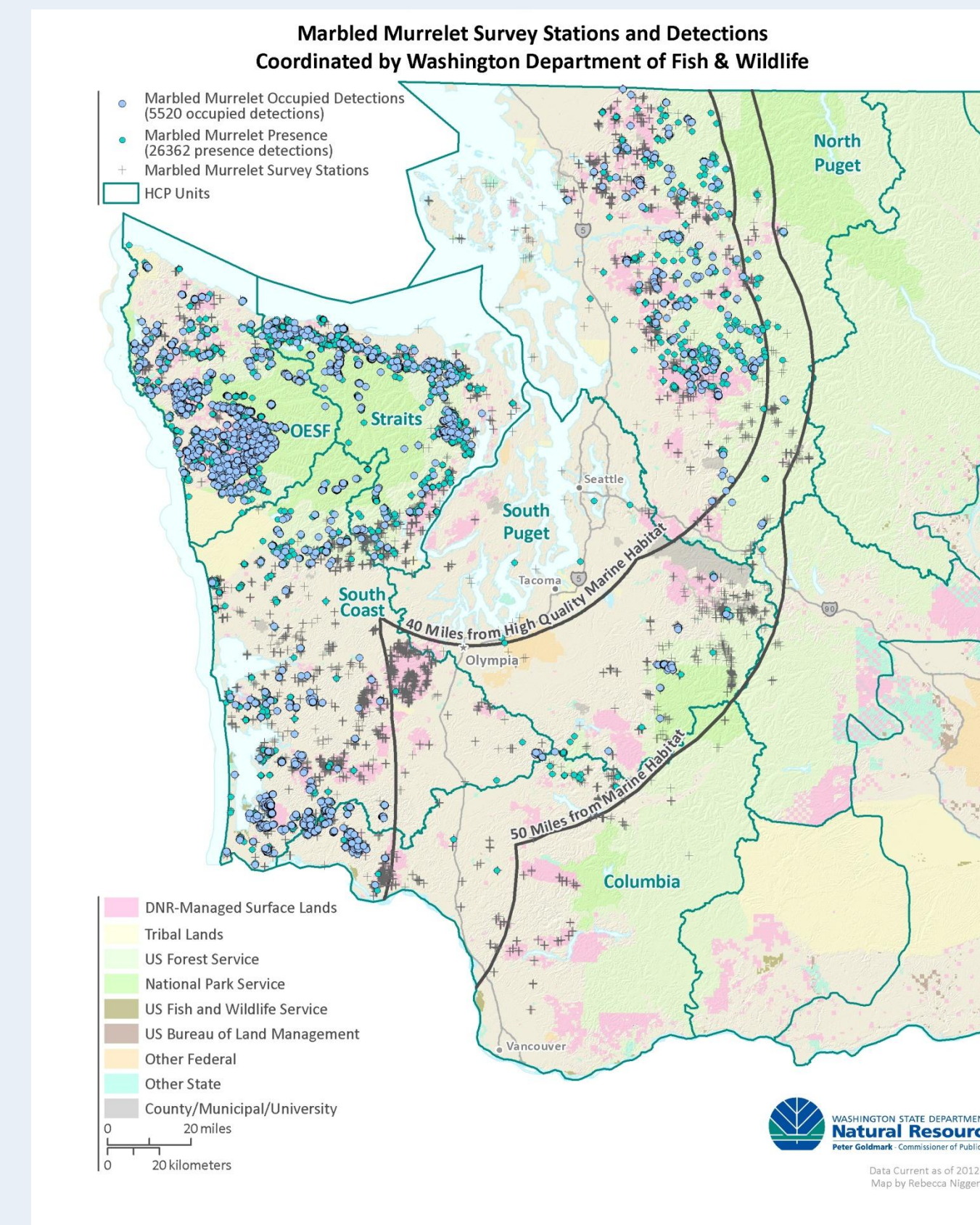
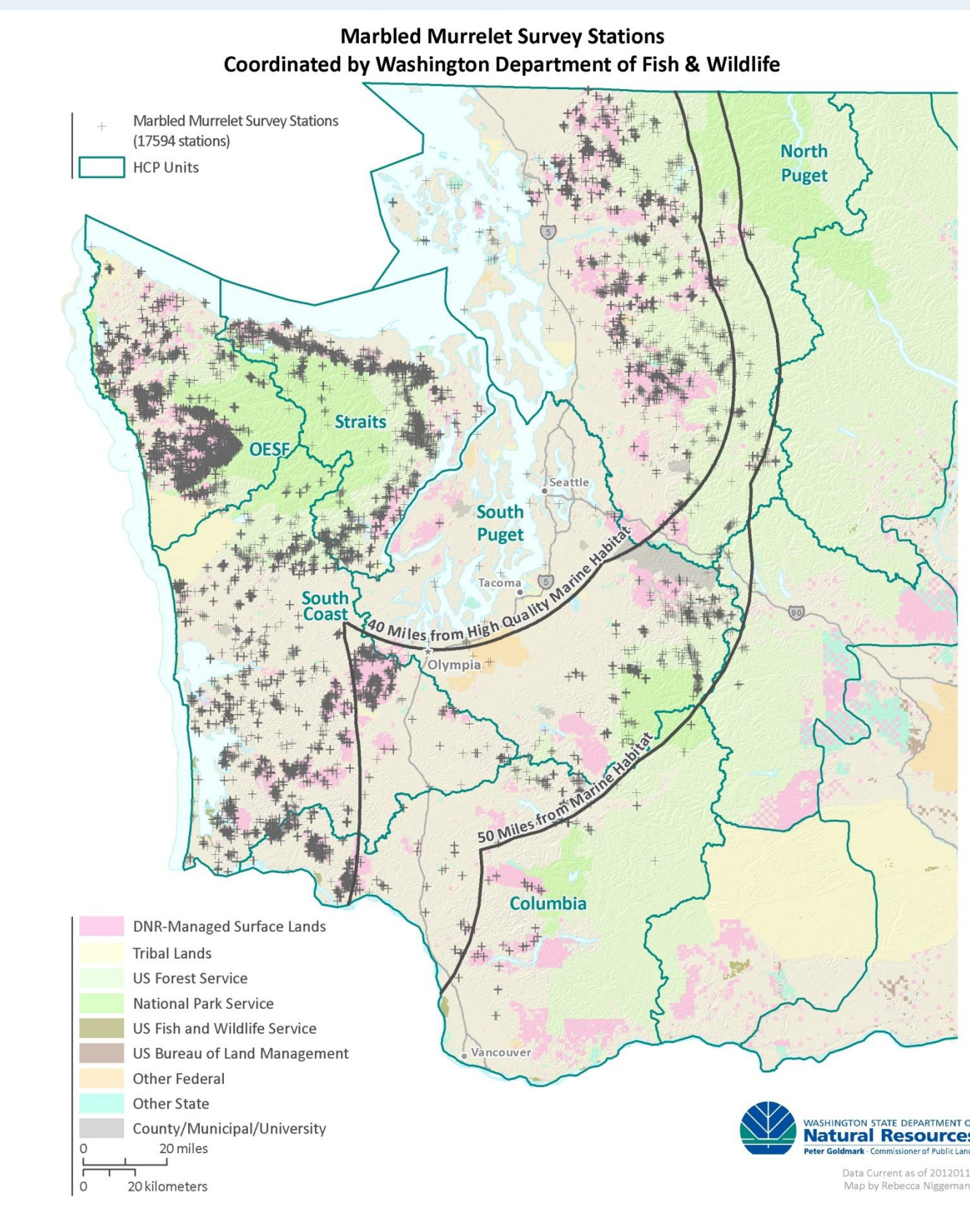
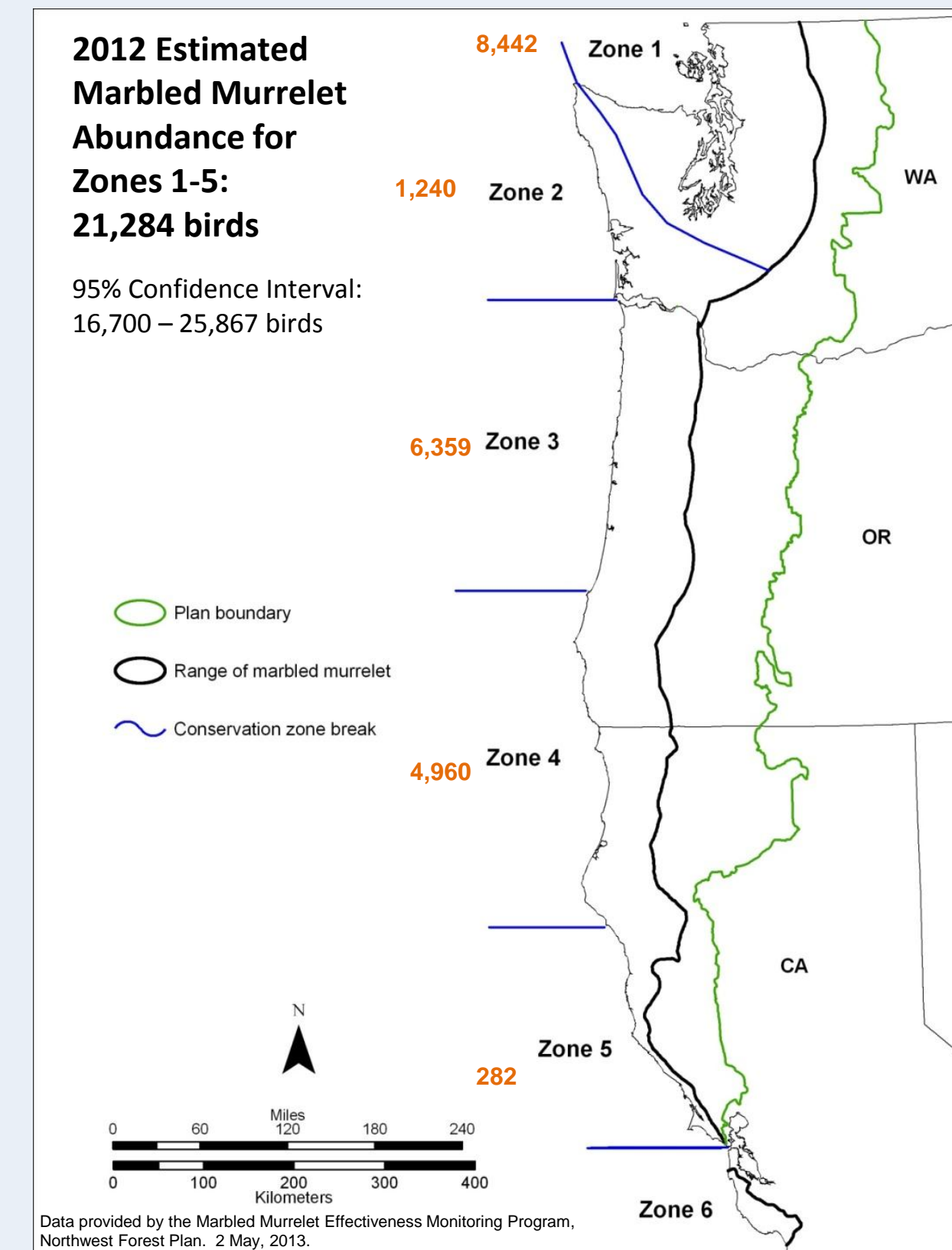
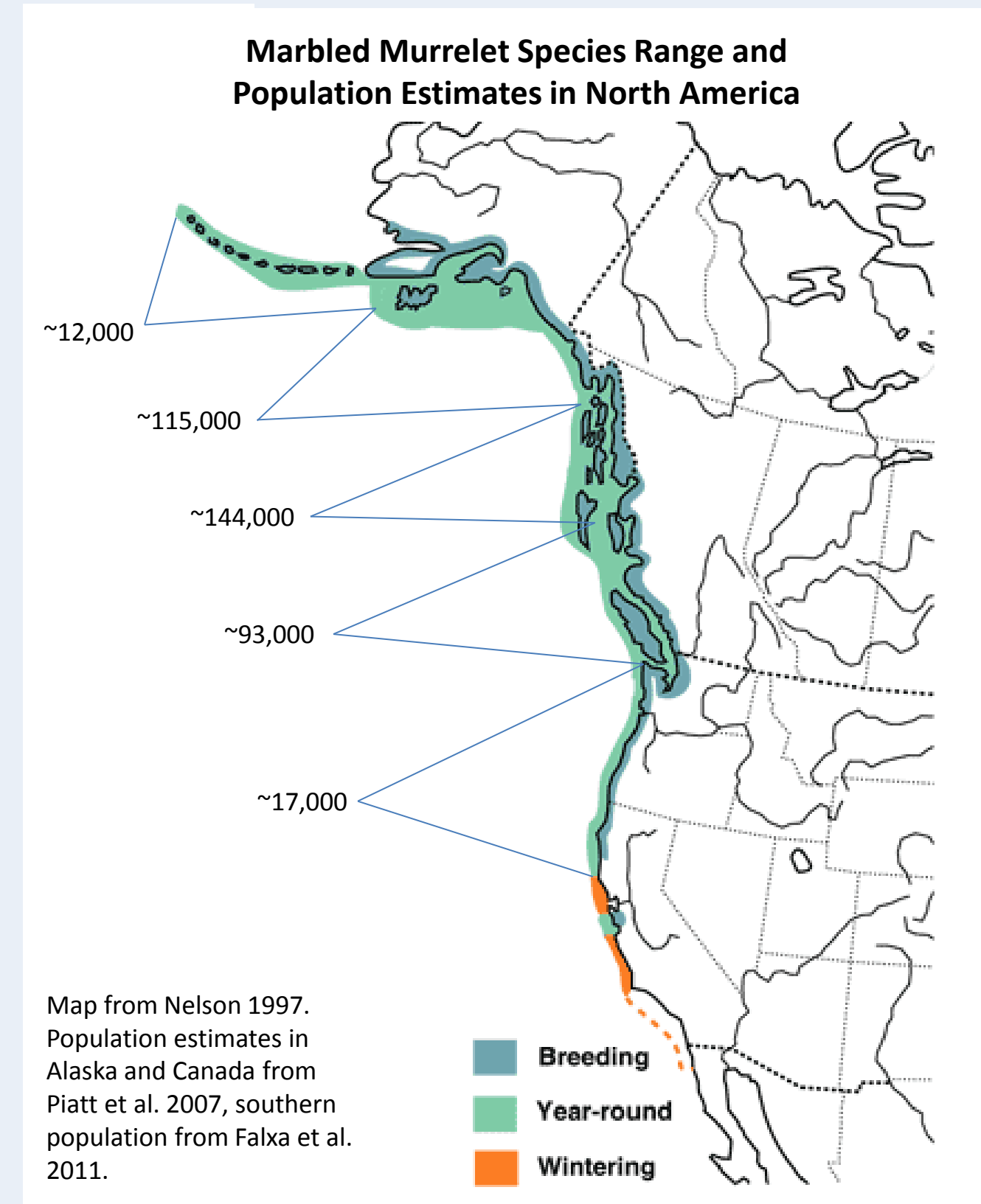
While nesting habitat is generally in older conifer forests, nests have been found in younger forest stands with remnant old trees and also in trees as young as 80 years that have developed platforms from damage by mistletoe, storms, or other causes.

Parents take turns incubating the egg, exchanging places in the pre-dawn darkness. After hatching, the chick is left largely unattended a few days. Then for about 30 days, the parents provision the nestling with fish, mainly at dawn and dusk.

There is no evidence of parental care during or after fledging. On their first flight, fledgling murrelets must fly from the forest to marine waters and then fend for themselves.

Murrelet nests appear to be subject to substantial loss from predators such as ravens and jays, which prey on both eggs and chicks.

Several types of nest predators are attracted to roads, human activity and mosaic forest landscapes, including hard forest edges.



Marbled murrelet nests are extremely difficult to find. Only 51 nests are known in Washington. Thus, indirect evidence is used to interpret potential nesting behavior.

Trained biologists conduct inland murrelet surveys to identify 'occupied' sites. They follow standard protocols—looking up into the forest canopy for two hours around dawn, attempting to detect murrelets exhibiting behaviors that “strongly indicate that the site has some importance for breeding” (Pacific Seabird Group).



In 2010, there were an estimated 5659 birds in the waters off the coast of Washington state. Marbled murrelet populations in the state have declined by about 7% per year over the last 10 years.



At-sea surveys of marbled murrelets show few young birds, indicating that successful reproduction is low. Murrelet nesting also appears to fluctuate with prey fish abundance. Changing oceans conditions due to climate change may further decrease prey abundance. US Fish and Wildlife Service has identified prey fish abundance as an important topic for future research.



At sea, murrelets are vulnerable to predation by peregrine falcons and bald eagles. They are also susceptible to injury or death from oil spills and entanglement in certain types of fishing gear.



**For more information:**  
USFWS Marbled Murrelet Species Profile: <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B08C>  
Northwest Forest Plan Effectiveness Monitoring for marbled murrelets: <http://www.reo.gov/monitoring/index.shtml>  
DNR's Marbled Murrelet Conservation Strategy <http://1.usa.gov/lkQJri> (shortened link)

