Dredging and the Lark: an ESA Success Story



Possibility. In every direction.

October 20, 2016 WEDA, San Diego







Area of Enlargement

Streaked horned lark habitat





Streaked Horned Lark Listing & Critical Habitat Designation

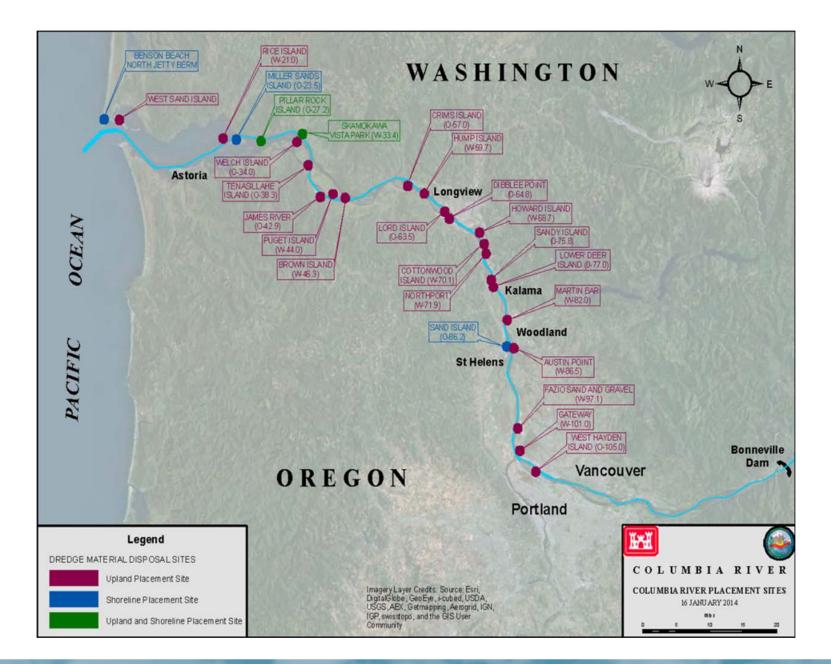
- The U.S. Fish and Wildlife Service (USFWS) listed the streaked horned lark (SHLA; *Eremophila alpestris strigata*) as *threatened* under the Endangered Species Act (ESA) in October 2013.
- Critical habitat also designated for the SHLA including many dredge sand placement sites.
- Consequence of listing (and associated rules): potential liability for "take".
- "Take' means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 USC 1532(19)



Port Facilities Overview

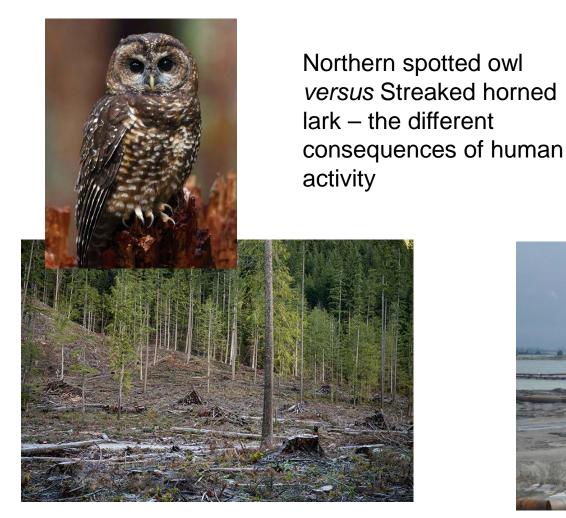








Listed Species, Habitat, and "Take"









Port of Portland Streaked Horned Lark (SHLA) Habitat Conservation Plan (HCP)

A proposal to the U.S. Fish and Wildlife Service (USFWS) for an alternate conservation strategy under section 10 of the Endangered Species Act (ESA):

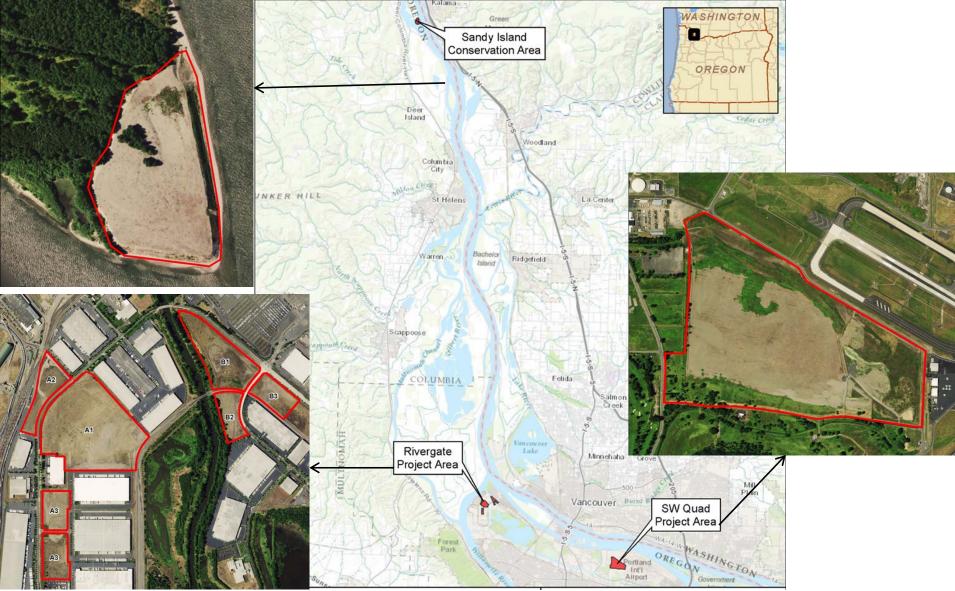
- biological goals and objectives,
- avoidance, minimization, and mitigation measures,
- adaptive management,
- maintains designated Critical Habitat
- opportunities for SHLA Research,
- monitoring and reporting,
- Incidental Take Permit (ITP)

Streaked Horned Lark Eremophila alpestris strigata





SHLA Habitat Conservation Plan





PDX – SW Quad safety fill area





Estimated Amount of Take

Project Area/Activity	Estimated Take (rounded up to nearest whole number)	
Rivergate Development (permanent habitat loss anticipated in Permit Years 1–3)	8 nesting pairs	
SW Quad Development (permanent habitat loss anticipated in Permit Years 20–30)	0 nesting pairs*	
Uncertainty Allowance for Development Activities	8 nesting pairs	
PDX Intermediate Zone WHMP Implementation (subject to changed circumstances, take of 1 nesting pair each year of ITP term, on average, or up to 30 pairs over 30 years)**	30 nesting pairs	
Total Take Request	46 nesting pairs	

The formula for calculating the projected number of nesting pairs at Rivergate and the SW Quad in any given year is:

Number of Nesting Pairs = Total Suitable Habitat / Site-specific Territory Density

**This amount of take is only applicable if the SHLA 4(d) Special Rule no longer addresses take related to the Port's aviation wildlife hazard management activities within the PDX Intermediate Zone.



Bird Years:

 To quantify the cumulative effect to SHLA nesting pairs over the permit term, cumulative bird-years are used as a conceptual metric to describe the projected number of each year's SHLA nesting pairs at a particular site over time, based on projected changes in annual abundance due to changes in habitat area, habitat quality, or other factors.



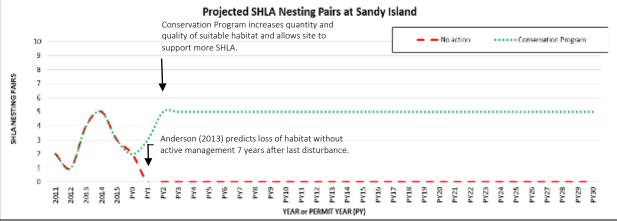
Sandy Island Conservation Area

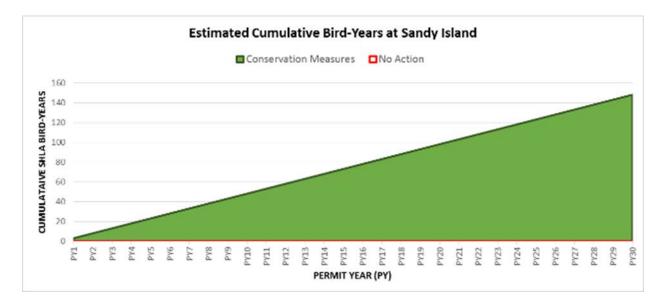
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 - Secure
 - Secure



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Projected SHLA Nesting Pairs & Bird Years at Sandy Island through the ITP





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Net Conservation Benefit of the HCP & ITP

Project Area	Cumulative Bird-Years with HCP and ITP	Cumulative Bird-Years with No Action	Impact of the HCP and ITP (Cumulative Bird-Years)
Rivergate	9	6	+3
SW Quad	82	12	+70
PDX Intermediate Zone	0	0	0
Sandy Island Conservation Area	148	0	+148
Total Plan Area	239	18	+221













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