

Roberts Bank Terminal 2 Project

Coastal birds EIS Section 15.0

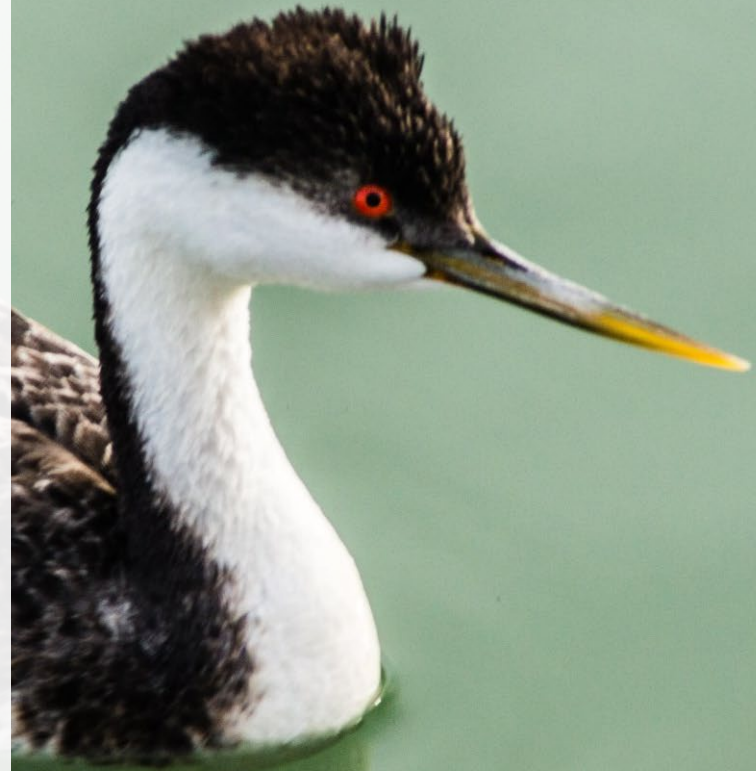
Sean McNulty, M.Sc., Manager, Environment, Infrastructure Sustainability
Vancouver Fraser Port Authority

James Rourke, M.Sc., RPBio, Senior Biologist
Hemmera

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Overview – coastal birds

- Summary of assessment conclusions, mitigation, and follow-up
- Sub-components and representative species
- Assessment work
 - Road mortality
 - Artificial light
 - Habitat loss
- Conclusions

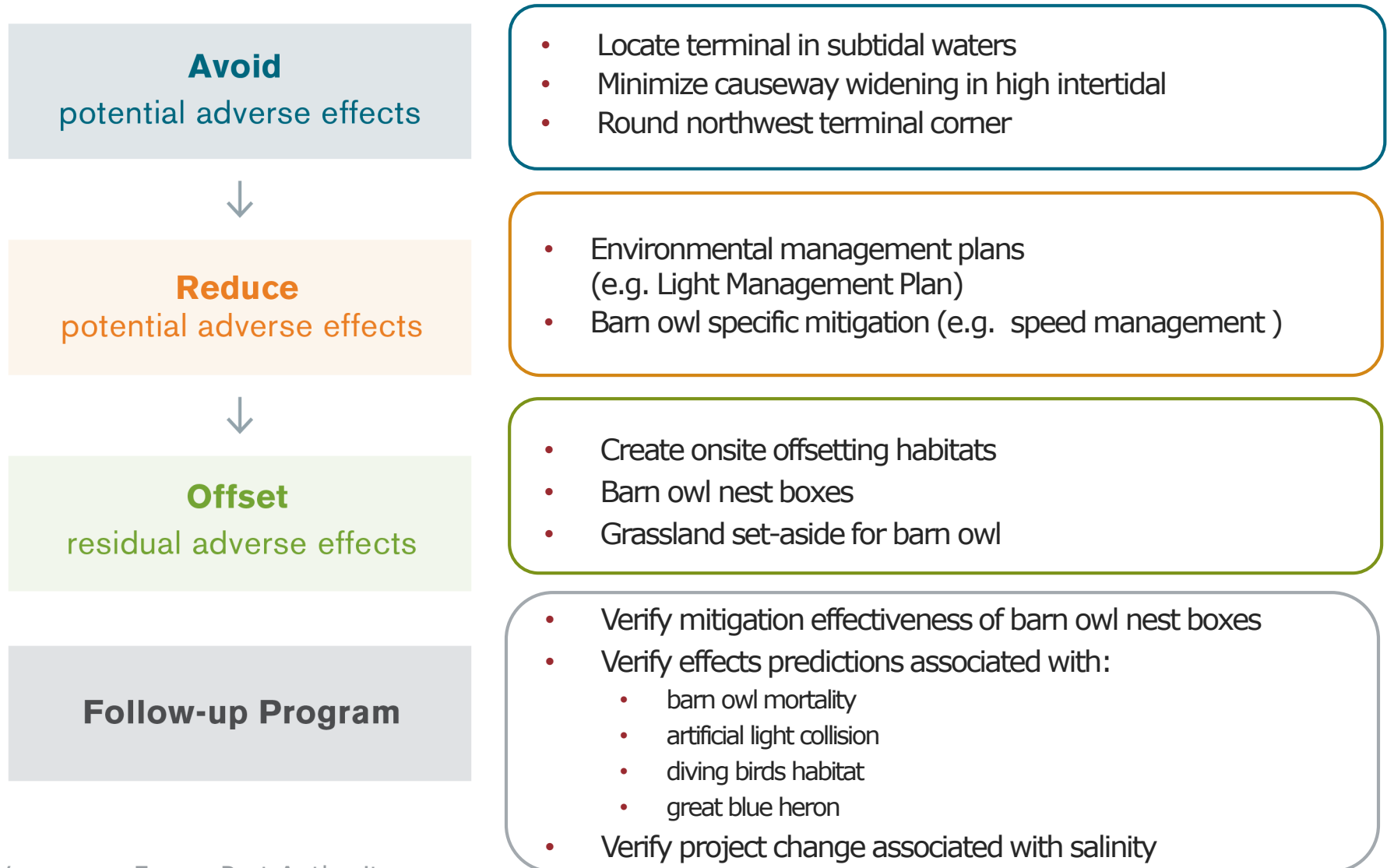


Assessment conclusions, mitigation, and follow-up

With mitigation, the project is not expected to result in significant adverse residual effects to coastal birds

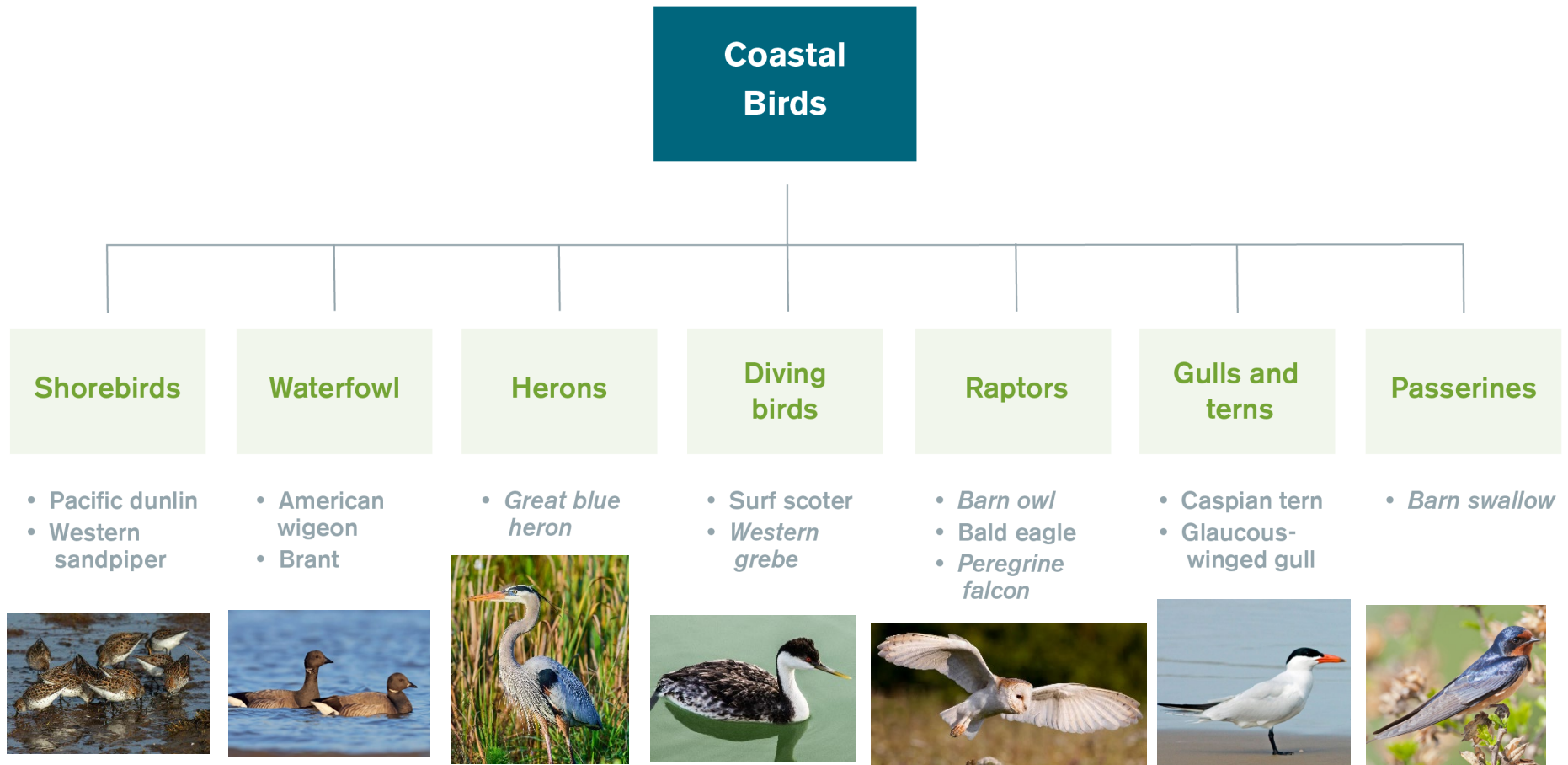
- Careful project design avoids impacts to coastal birds
- Abundant coastal bird populations are habituated to existing development
- Assessment informed by decades of bird studies at Roberts Bank, consultation with experts, and engagement with Indigenous groups
- Comprehensive mitigation and offsetting measures
- Committed to a Follow-up Program to verify the accuracy of effects predictions and mitigation effectiveness

Assessment conclusions, mitigation, and follow-up



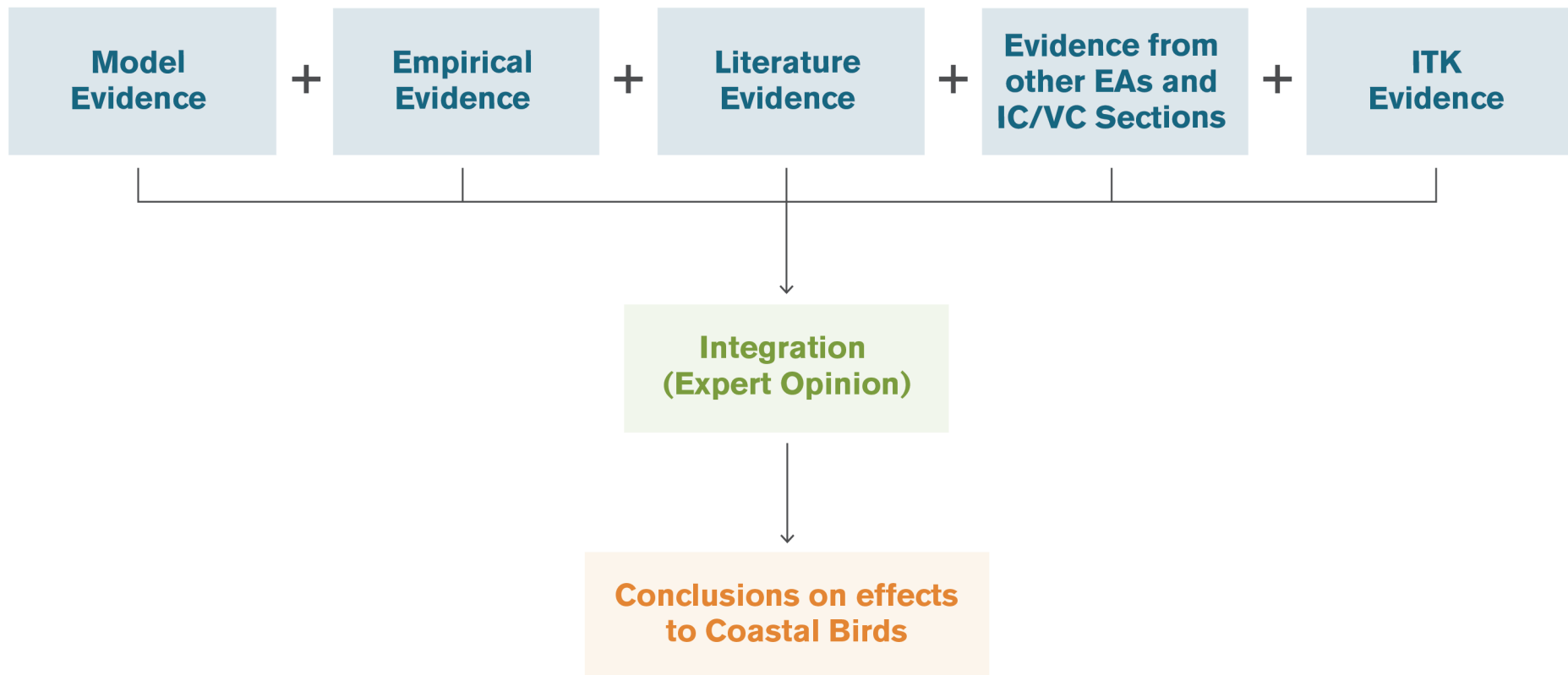
Sub-components and representative species

Sub-components and representative species were used to assess the potential for project-related effects to coastal birds



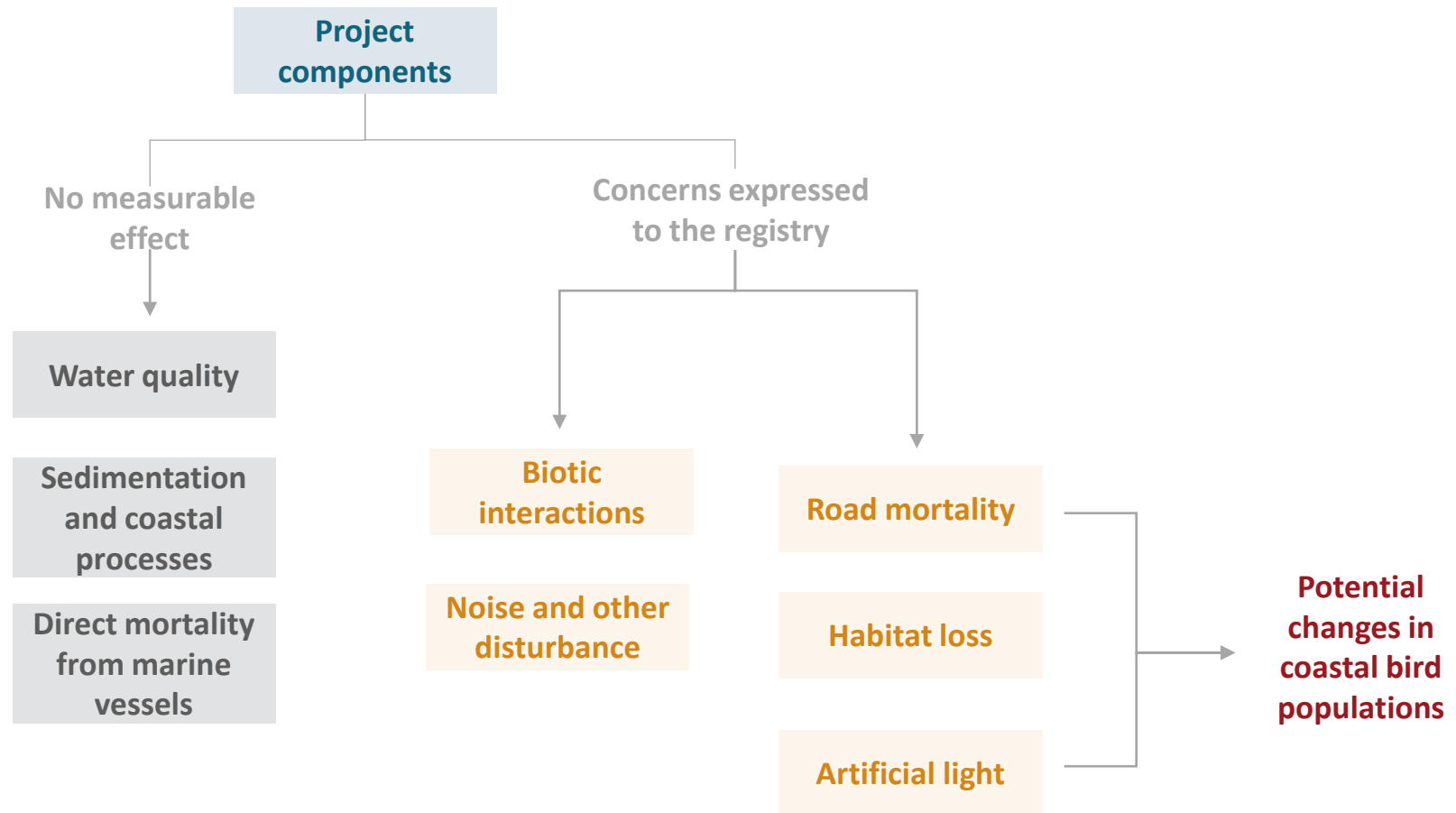
Assessment work – coastal birds

A broad base of information sources informed the assessment of project effects using multiple lines of evidence



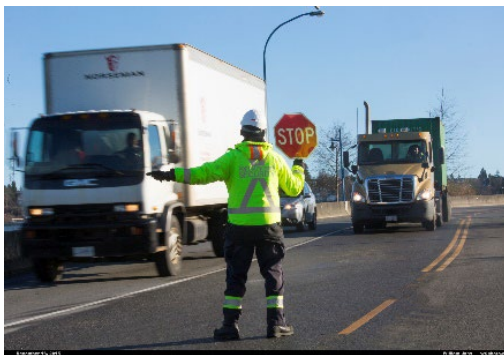
Coastal birds: summary of assessment

Decades of knowledge informed the assessment of potential effects to coastal birds



Assessment work - road mortality

Mitigation measures will be implemented to reduce and offset potential increases in barn owl mortality



- Traffic volumes and speeds that impact barn owls already exist
- Likelihood of collisions will be reduced through:
 - speed management
 - education
 - driver awareness
- Potential barn owl road mortalities will be offset through:
 - barn owl nest boxes
 - offsite grassland set asides

Assessment work - road mortality

With mitigation, the project-related increase in vehicular traffic is expected to result in a negligible adverse residual effect to barn owl or coastal birds

Follow-up Program

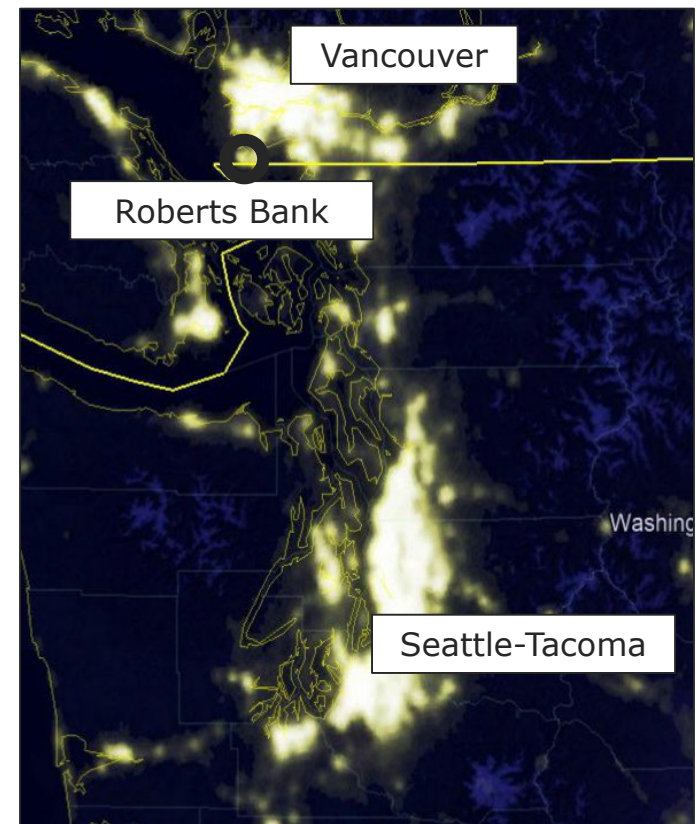
- Verify the accuracy of the effect prediction on barn owls following mitigation
- Verify the effectiveness of barn owl nest boxes



Assessment work – artificial light

Incremental change in artificial light with the project is predicted to be small

- Well-lit industrial site within an urban corridor
- Modelling indicates minor change to the overall light environment
- Previous studies found no mortalities on terminal pod and along causeway due to artificial light
- No reports of bird strandings, collisions, or disorientation due to light in 40 years of operation



Assessment work – artificial light

With mitigation, project-related changes in the light environment are expected to result in negligible adverse residual effects to coastal birds

Mitigation – Light Management Plan

- Minimise the number of light installations
- Semi-automated terminal – minimally-lit
- Use down-shielded lighting fixtures
- Minimise amount of obstruction avoidance lighting on tall structures
- Use flashing warning lights



Follow-up Program

- Verify the accuracy of the effects prediction

Assessment work – habitat loss

With mitigation, project-related habitat loss is expected to result in a non-significant adverse residual effect to diving birds

- Residual effect is limited to diving birds
- Habitat loss associated with loss of foraging opportunity in subtidal and intertidal habitats
- An abundance of alternative foraging habitat is available to diving birds within the local assessment area:



- ~1,800 ha of alternative subtidal and 2,900 ha of similar intertidal habitat exist
- Affected area represents ~3% of subtidal macrofauna biomass

Assessment work – habitat loss

Mitigation

- Habitat loss for diving birds will be partially offset through:
 - Natural colonization of hard-surface infrastructure by invertebrates
 - On-site habitat creation (e.g., eelgrass habitat supporting fish)

Follow-up Program

- Verify the accuracy of the effect prediction
- Verify the effectiveness monitoring of offsetting habitat



Assessment conclusions – coastal birds

With mitigation, the project is not expected to result in significant adverse residual effects to coastal birds.

- Careful project design avoids impacts to coastal birds
- Abundant coastal bird populations are habituated to industrial setting
- Assessment informed by decades of bird studies at Roberts Bank, consultation with experts, and engagement with Indigenous groups
- Comprehensive mitigation and offsetting measures
- Committed to a Follow-up Program to verify the accuracy of effects predictions and mitigation effectiveness

Thank You