



Western Washington University
Western CEDAR

Salish Sea Ecosystem Conference

2018 Salish Sea Ecosystem Conference
(Seattle, Wash.)

Apr 6th, 11:30 AM - 11:45 AM

How 19 years of BC coastal waterbird citizen science data is informing conservation planning

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How BC Coastal Waterbird Survey citizen science data is informing conservation planning



Don McCullough

Karen Devitt and James Casey, Bird Studies Canada





BIRD STUDIES
ÉTUDES D'OISEAUX **CANADA**

Conserve wild birds through sound science, on-the-ground action, innovative partnerships, public engagement, and science-based advocacy



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BC Coastal Waterbird Survey

- Established in 1999
- Abundance and distribution of coastal birds
- Citizen science-based



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BC Coastal Waterbird Survey By the Numbers

# surveys	25,944
# sites surveyed	349
# volunteers	1413
# volunteer hours	44,951
# records	432,994



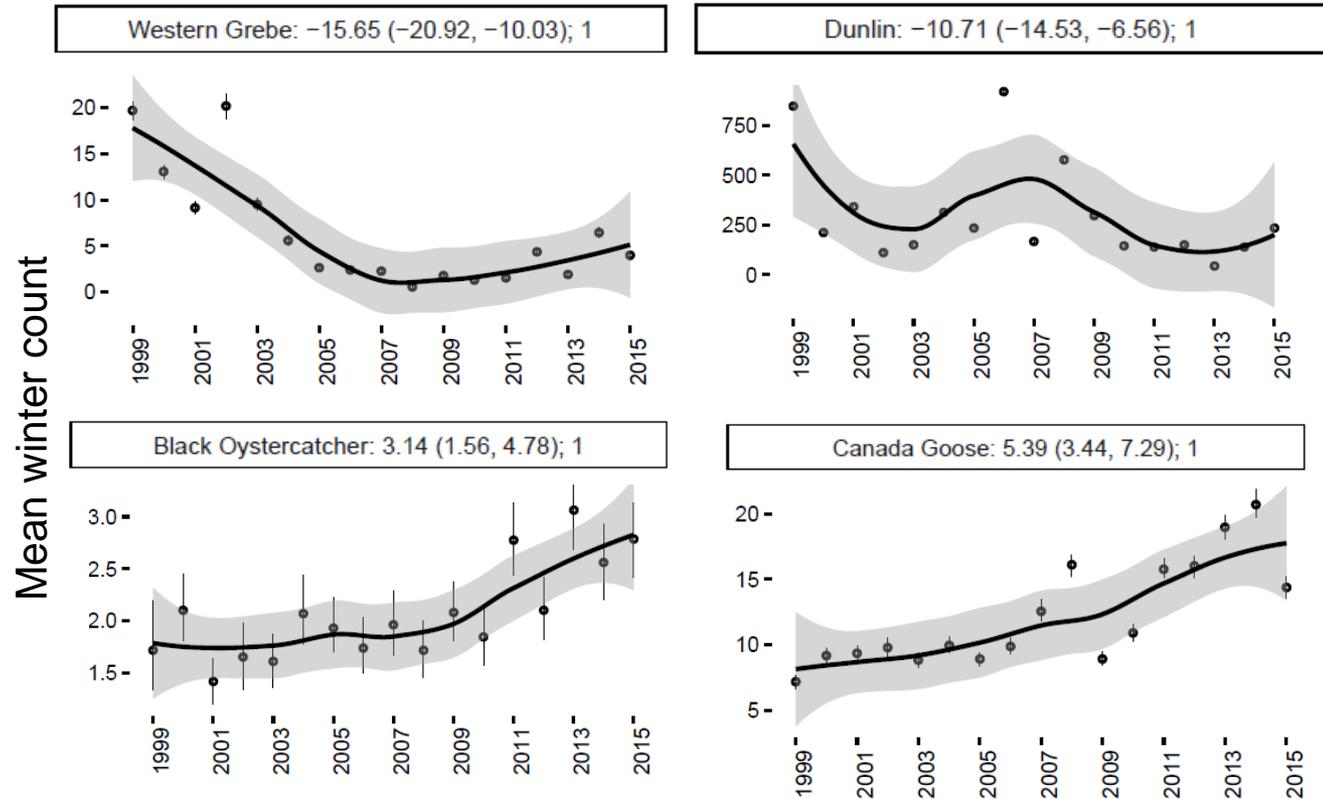
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BC Coastal Waterbird Survey

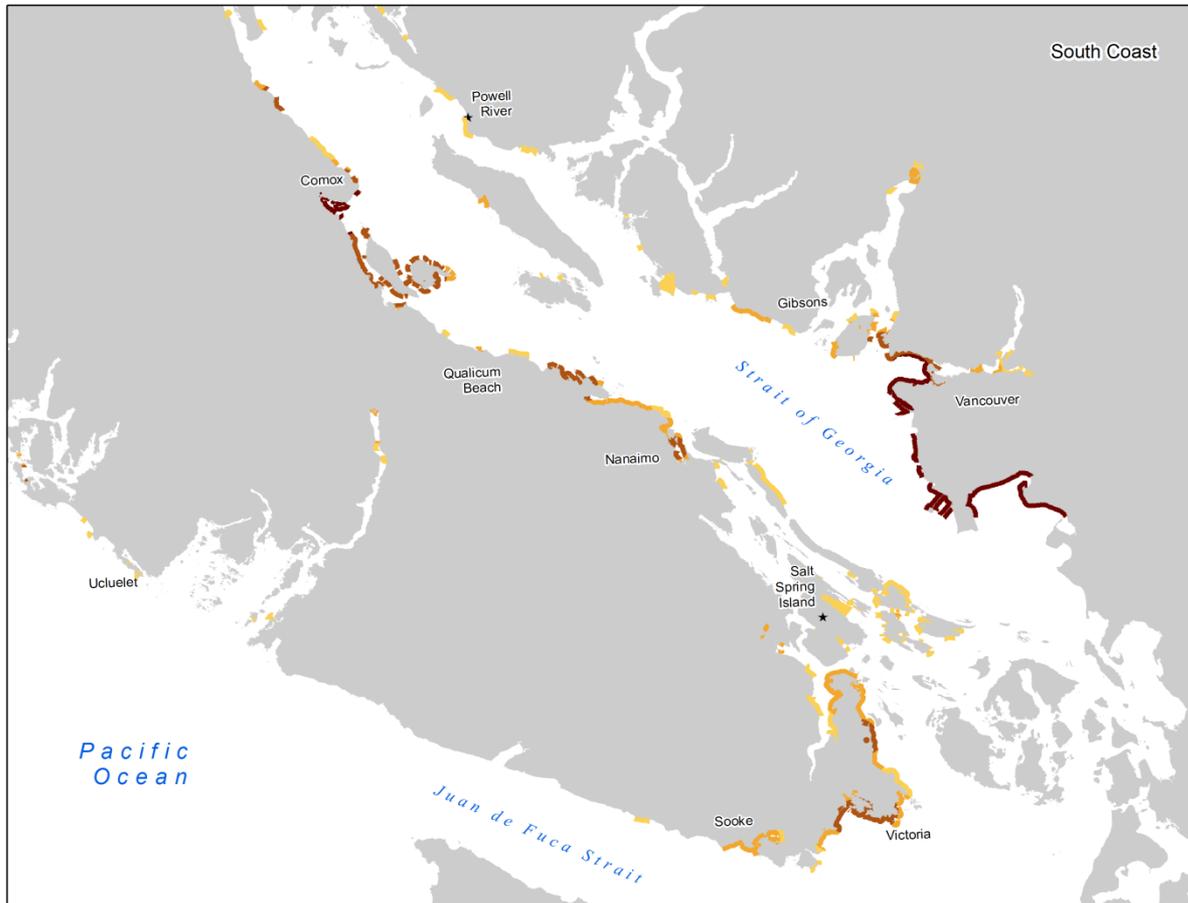
Trends in the Salish Sea

1999-2016

- 16 declining
- 4 increasing
- 37 no trend



BC Coastal Waterbird Survey- Hotspot Analysis

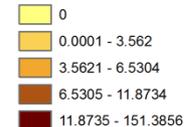


British Columbia Coastal Waterbird Survey

Monthly Winter Waterbird Data
(December-February) 1999-2016

Waterbirds: Alcids,
Cormorants, Dabbling Ducks,
Geese and Swans, Grebes,
Gulls, Loons, Mergansers,
Scaup, Scoters

Kernel Density (mean # birds/ sq km)



Canada
This project was undertaken with the financial support of the Government of Canada.

Ce projet a été réalisé avec l'appui financier du gouvernement du Canada



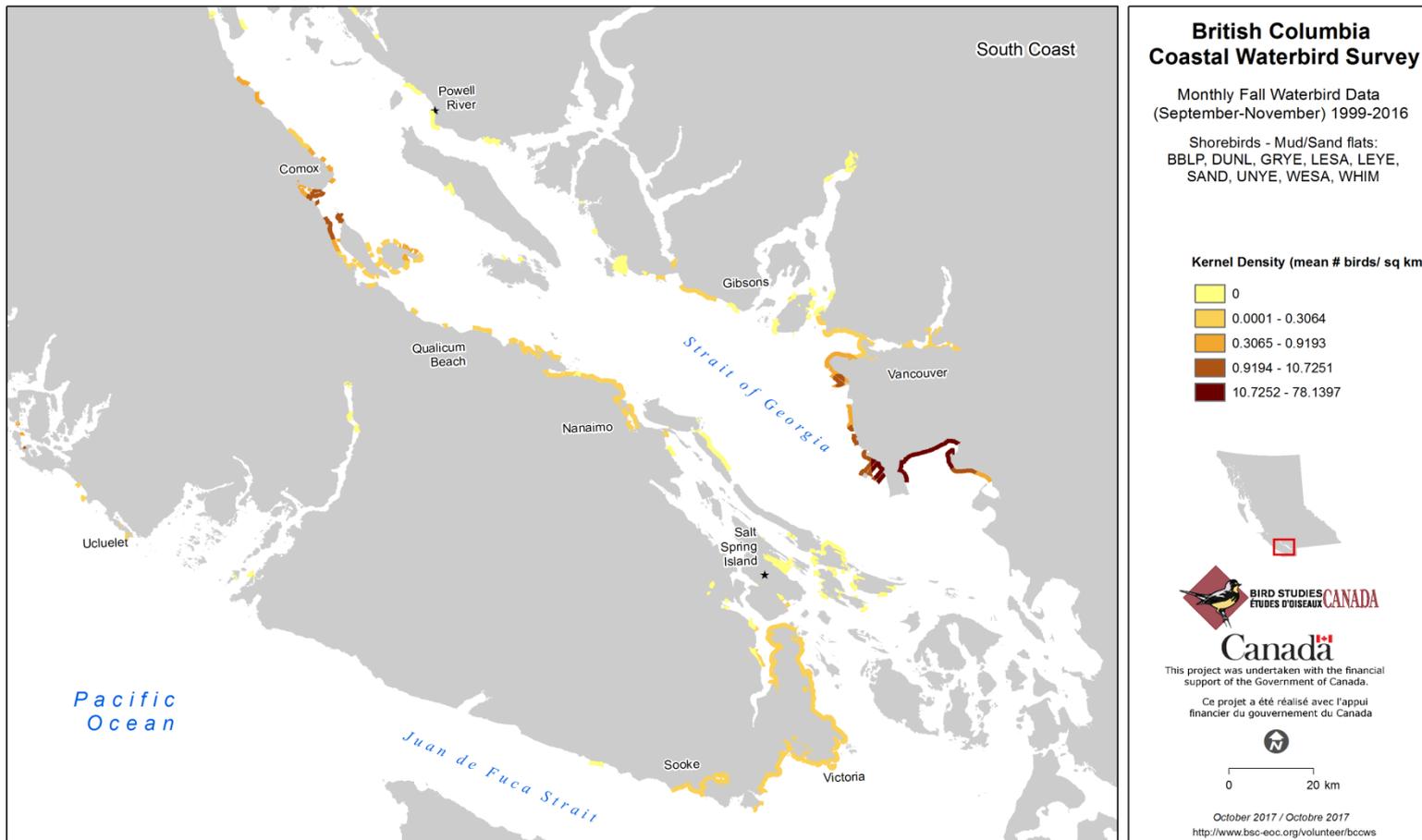
0 20 km

October 2017 / Octobre 2017
<http://www.bsc-eoc.org/volunteer/bccws>



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BC Coastal Waterbird Survey- Hotspot Analysis



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BIRDLIFE IMPORTANT BIRD AND BIODIVERSITY AREA

Zones importantes pour la conservation des oiseaux dans le monde
Important Bird Areas of the World
世界上的重點鳥區



Areas Importantes para la Conservación de las Aves en el mundo
Ключевые орнитологические территории мира
المناطق المهمة للطيور في العالم



■ Unprotected IBA or protection status unknown
■ Wholly or partially protected IBA

The present list of IBAs is based on the 1994 IBA checklist. It includes all IBAs in the world, including Antarctica, China, New Zealand, New Zealand, the USA, and the UK. The IBA checklist is a list of sites that are considered to be of international importance for the conservation of birds. The IBA checklist is a list of sites that are considered to be of international importance for the conservation of birds. The IBA checklist is a list of sites that are considered to be of international importance for the conservation of birds.

The presentation of information on this list is for general information only. It does not imply the expression of any opinion whatsoever on the part of BirdLife International concerning the legal status of any territory, territory or area, or concerning the delimitation of its frontier or boundaries.

More information on BirdLife International's Important Bird Areas programme is given on the reverse of this poster.

AGE V. JENSEN CHARITY FOUNDATION

10,000 sites to save

10,000 sites à sauver

10,000 個需要拯救的地方

10,000 sitios para salvar

10,000 территорий подлежат охране

10,000 مواقع بحاجة للحماية



Boundary Bay - Roberts Bank - Sturgeon Bank IBA and (Fraser River Estuary)



Fraser River Estuary Important Bird Area



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Fraser River Estuary, IBA in Danger

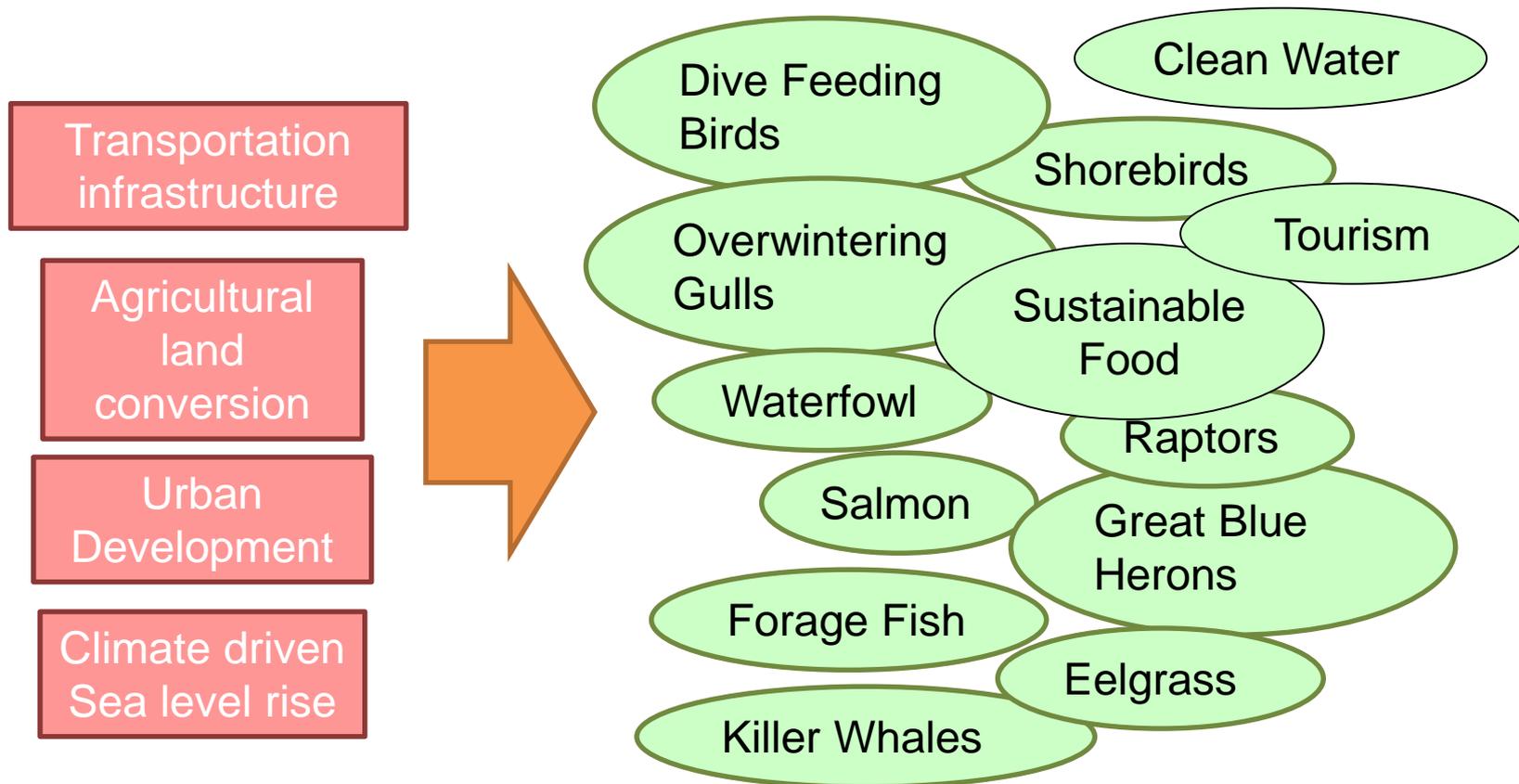
- Goal: broadly endorsed conservation solution
- Two key components
 - Open Standards for the Practice of Conservation
 - Engagement Organizing

The Gosling Foundation

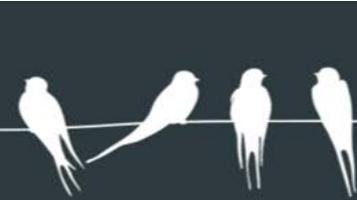
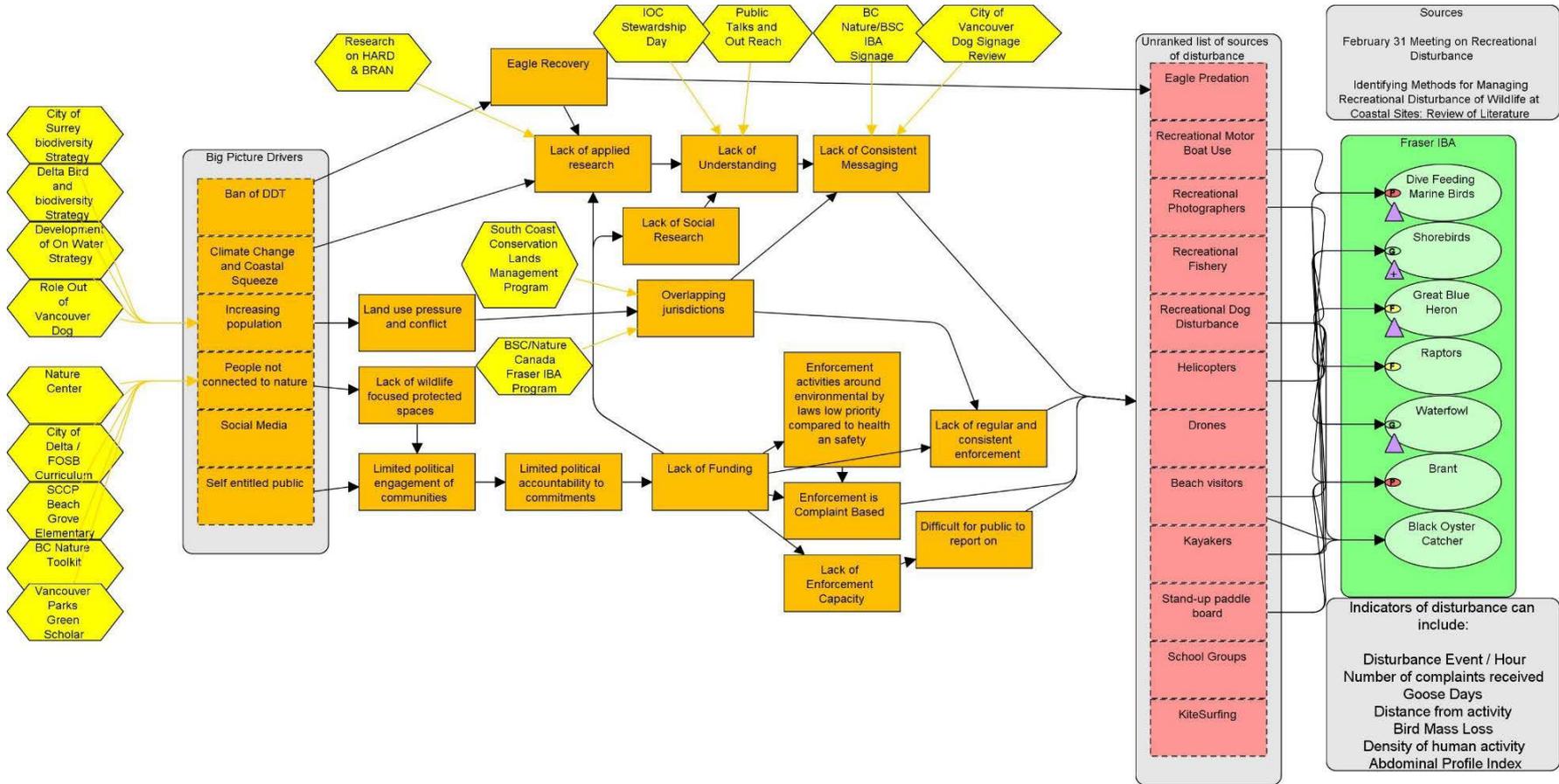


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Open Standards for the Practice of Conservation

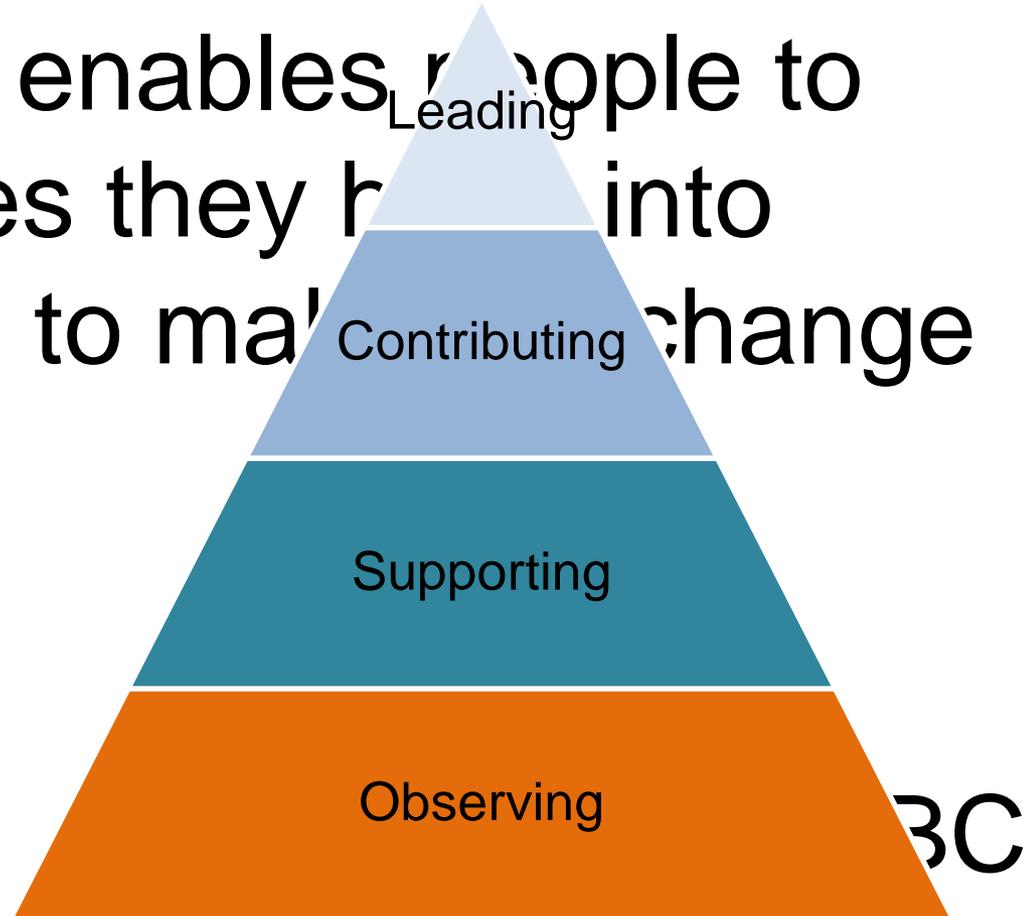


Open Standards for the Practice of Conservation



Engagement Organizing

“Leadership that enables people to
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change



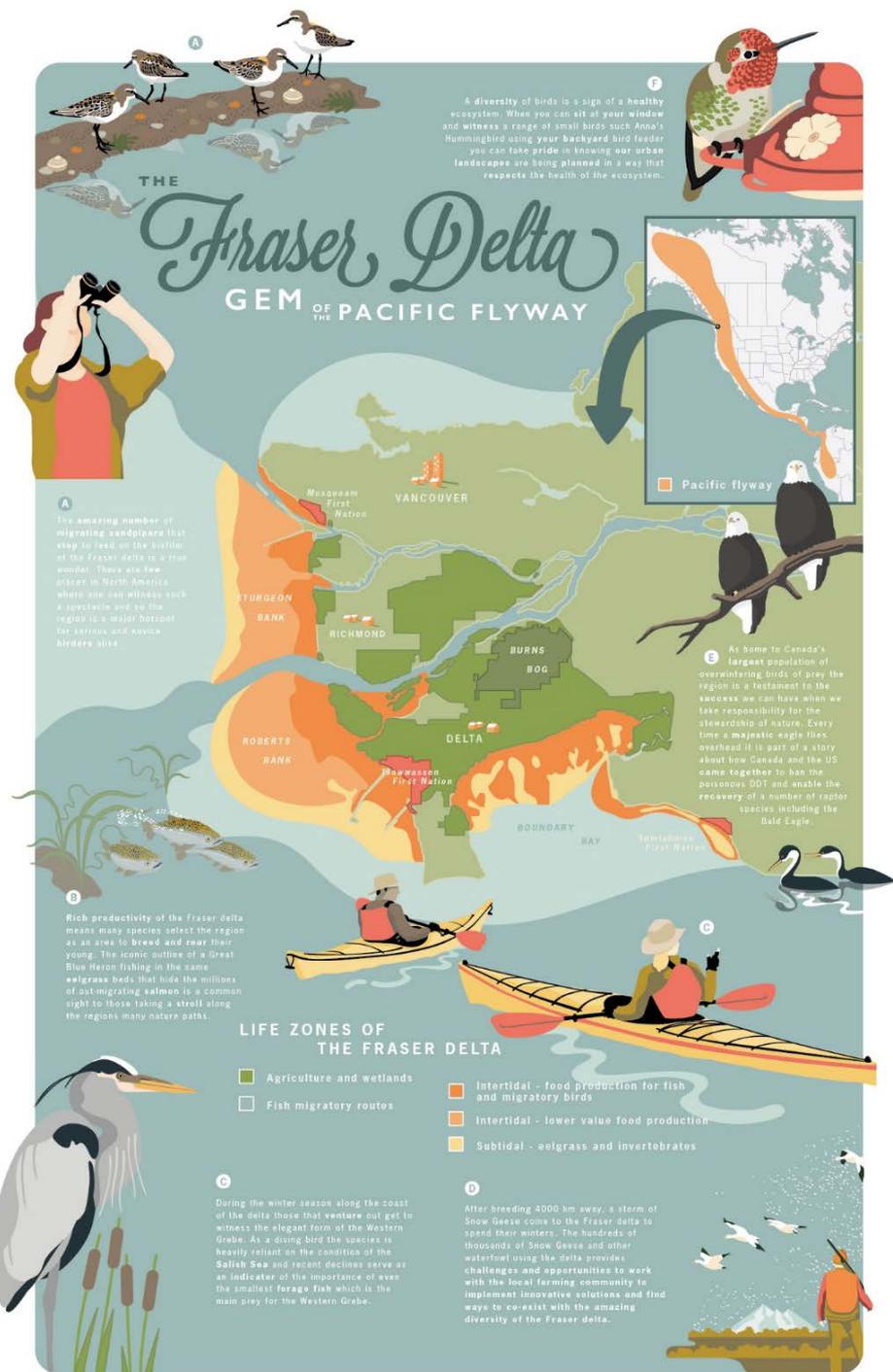
Citizen science and environmental planning in the Fraser River Estuary IBA

- Climate change adaptation and planning
- Oil spill response planning and modelling
- Municipal biodiversity strategies
- Property securement
- Environmental Assessments
- Academic studies



Summary

- Fraser Estuary IBA is an IBA In Danger
- Coastal Waterbird Survey and citizen science is part of the solution
- Next steps involve developing tools to empower communities to become leaders



Thank You

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Environment and
Climate Change Canada



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PORT of
vancouver



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