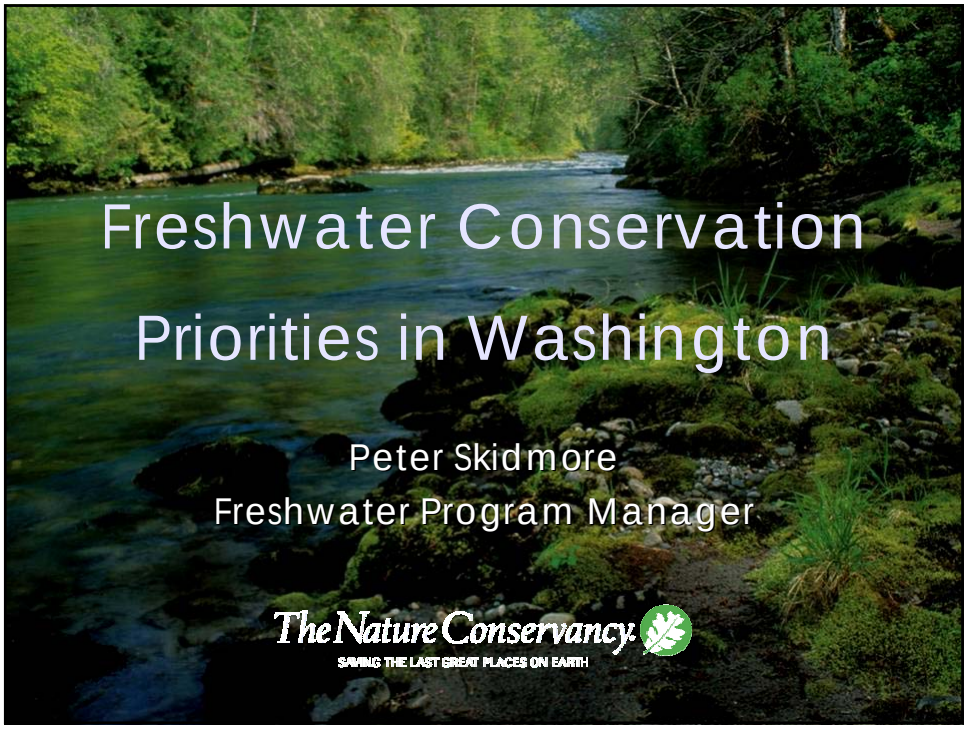
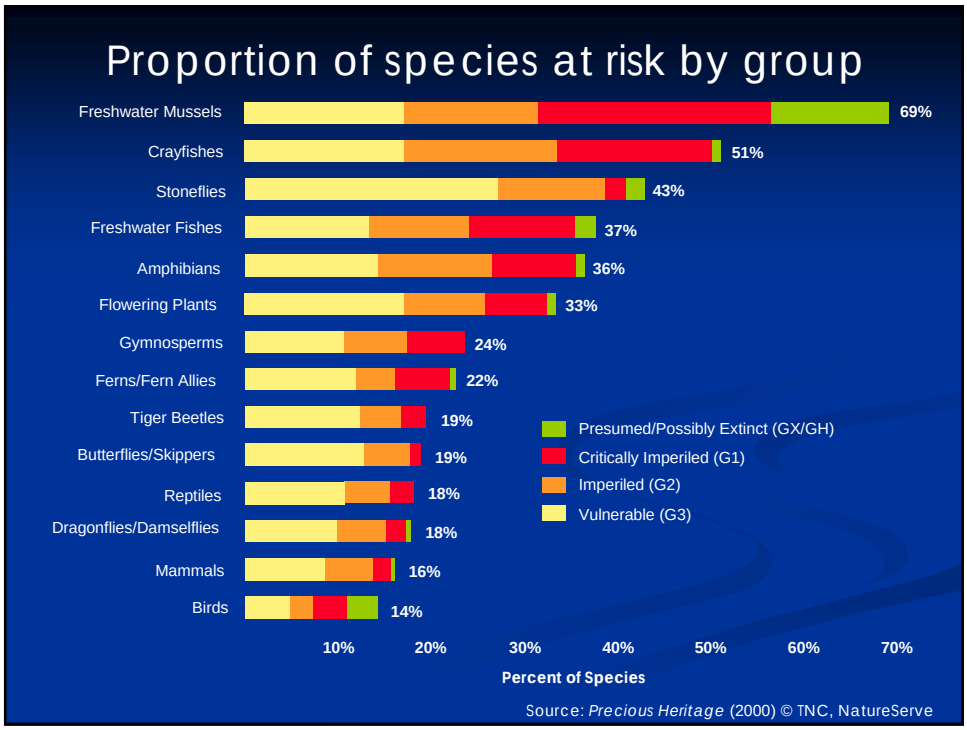

Freshwater Conservation
Priorities in Washington
Peter Skidmore
Freshwater Program Manager
The Nature Conservancy
SAVING THE LAST GREAT PLACES ON EARTH

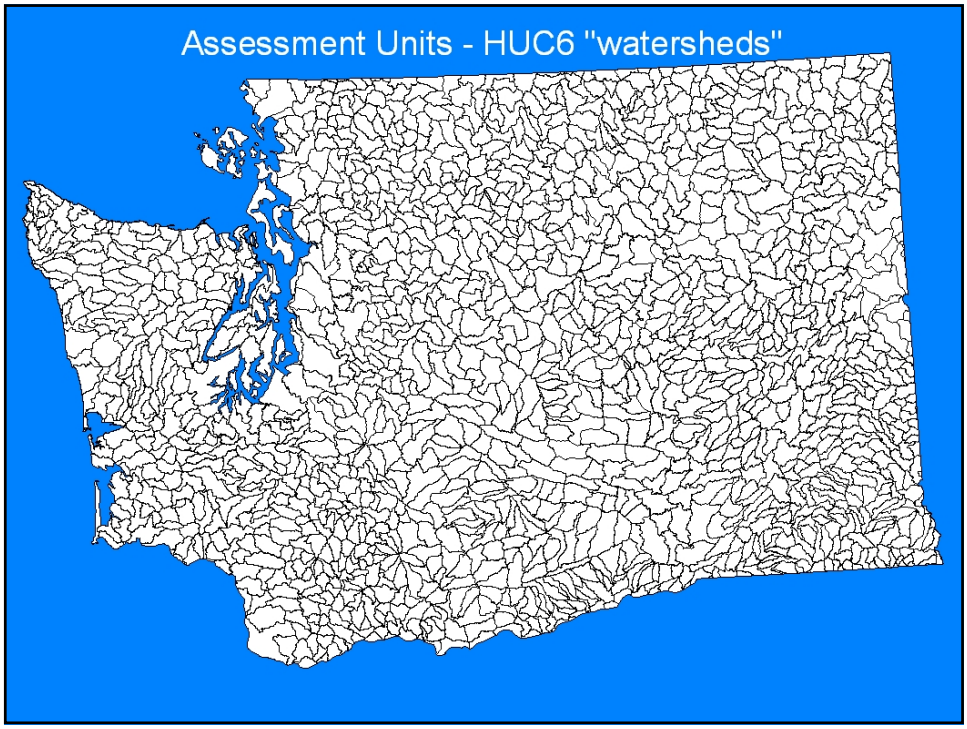

Proportion of species at risk by group
Freshwater Mussels 69%
Crayfishes 51%
Stoneflies 43%
Freshwater Fishes 37%
Amphibians 36%
Flowering Plants 33%
Gymnosperms 24%
Ferns/Fern Allies 22%
Tiger Beetles 19%
Butterflies/Skippers 19%
Reptiles 18%
Dragonflies/Damselflies 18%
Mammals 16%
Birds 14%
Presumed/Possibly Extinct (GX/GH)
Critically Imperiled (G1)
Imperiled (G2)
Vulnerable (G3)
10% 20% 30% 40% 50% 60% 70%
Percent of Species
Source: Precious Heritage (2000) © TNC, NatureServe

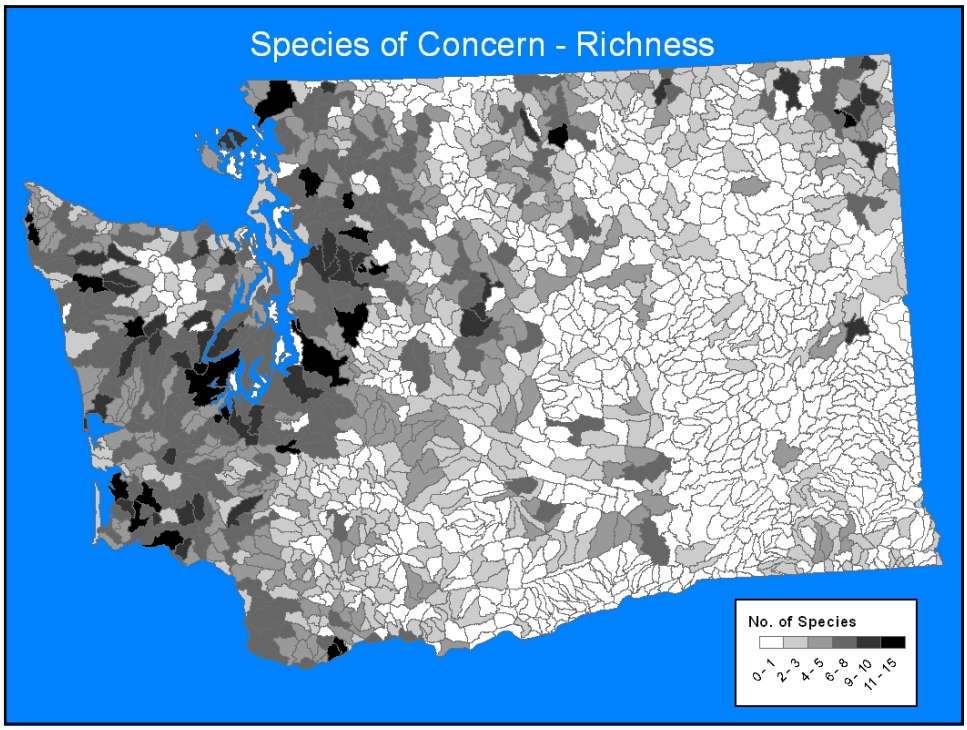
Mission

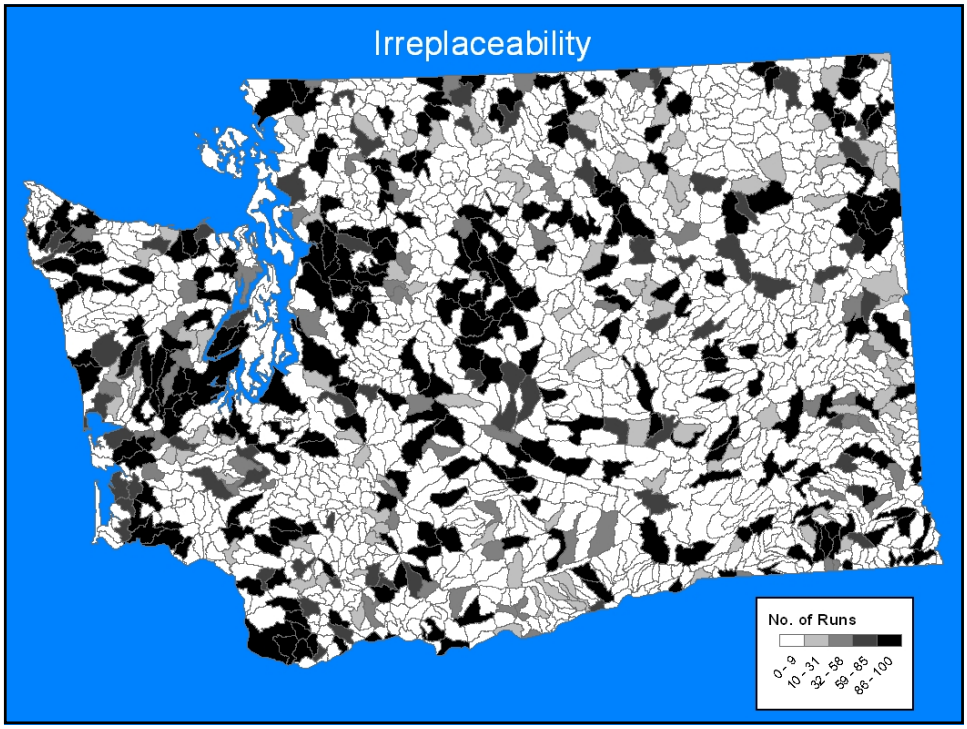
To preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.

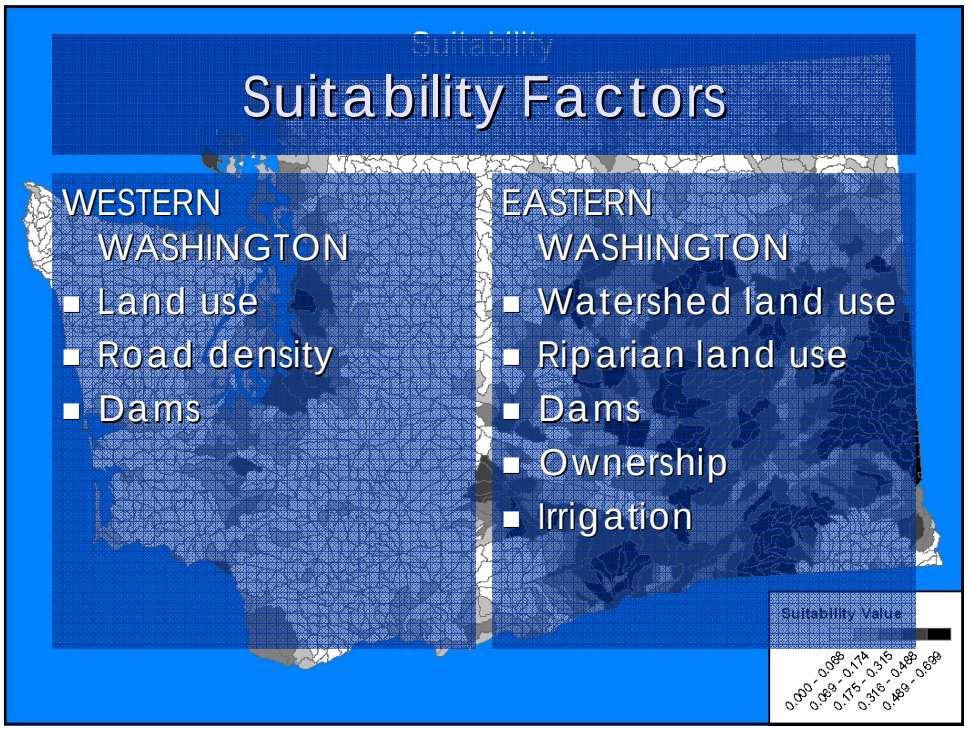
Overview

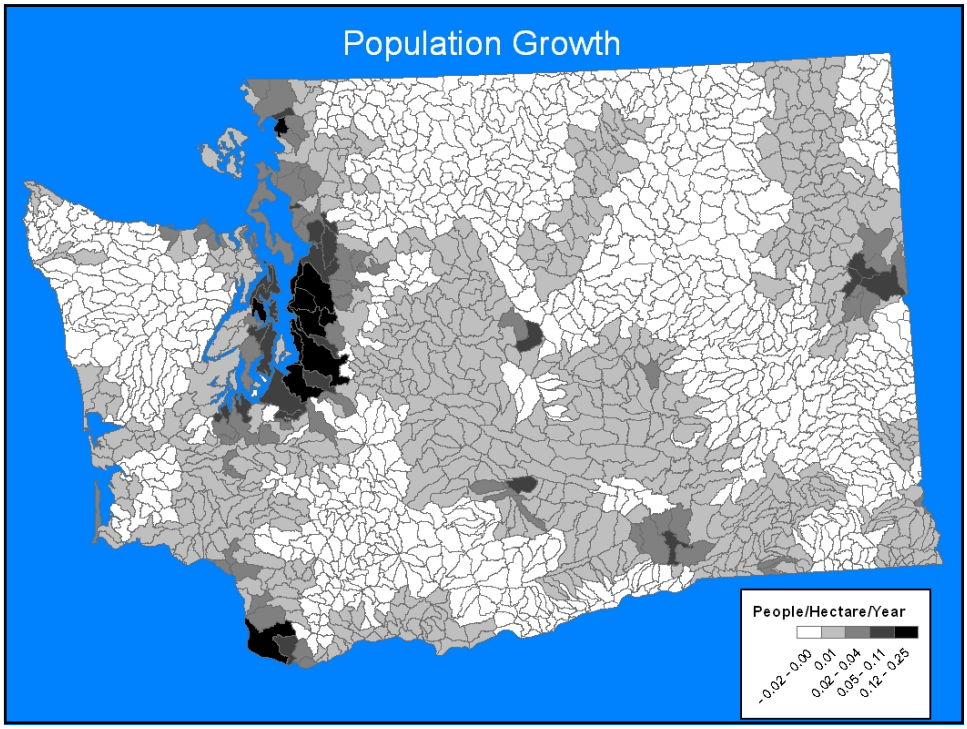
- Analyses
  - Biological value
  - landscape condition
  - threat
- Best places
- Indispensable experts

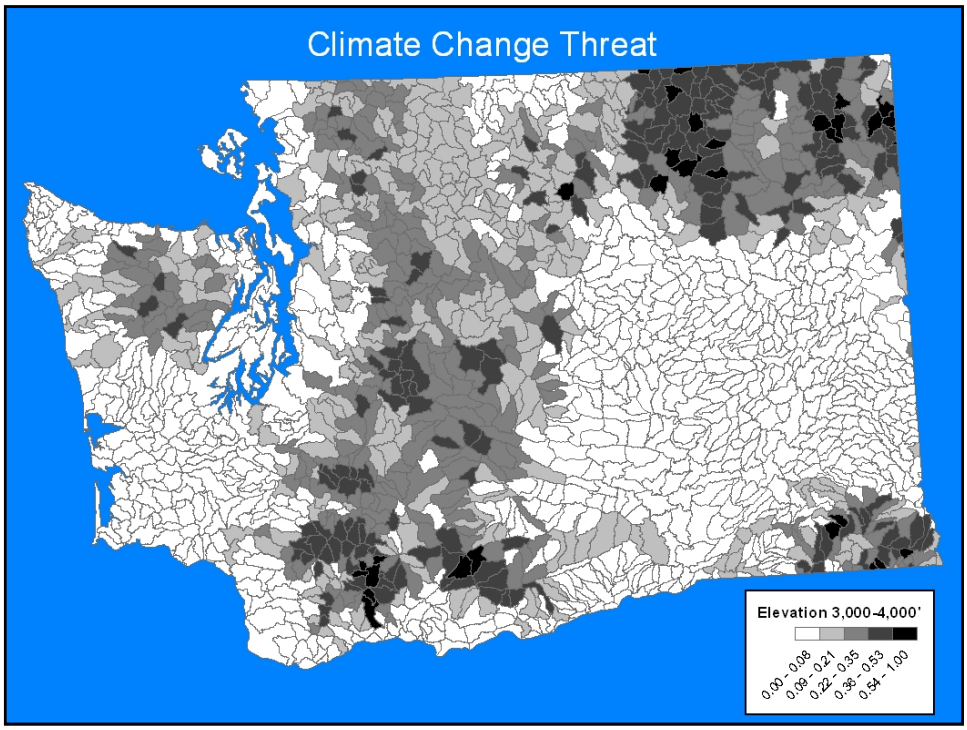

Assessment Units - HUC6 "watersheds"

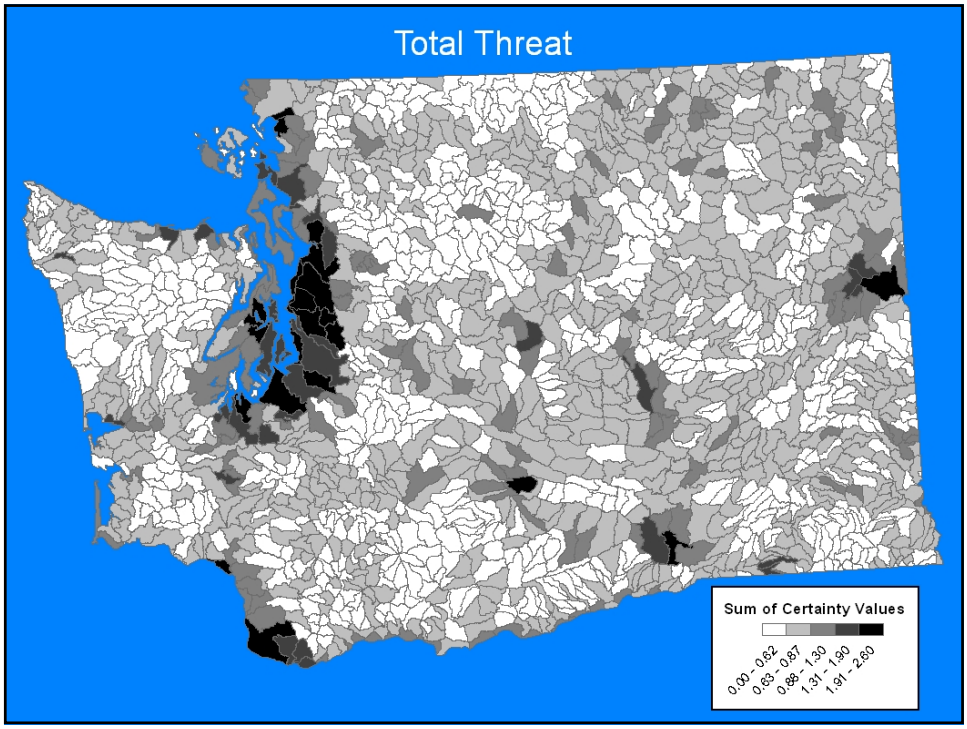

Species of Concern - Richness
No. of Species
0 - 1
2 - 3
4 - 5
6 - 8
9 - 10
11 - 15


Irreplaceability
No. of Runs
0 - 9
10 - 31
32 - 58
59 - 85
86 - 100


Suitability
Suitability Factors
WESTERN WASHINGTON
Land use
Road density
Dams
EASTERN WASHINGTON
Watershed land use
Riparian land use
Dams
Ownership
Irrigation
Suitability Value
0.000 - 0.068
0.069 - 0.174
0.175 - 0.315
0.316 - 0.488
0.489 - 0.699


Population Growth
People/Hectare/Year
-0.02 - 0.00
0.01
0.02 - 0.04
0.05 - 0.11
0.12 - 0.25


Climate Change Threat
Elevation 3,000-4,000'
0.00 - 0.08
0.09 - 0.21
0.22 - 0.35
0.36 - 0.53
0.54 - 1.00


Total Threat
Sum of Certainty Values
0.00 - 0.62
0.63 - 0.87
0.88 - 1.30
1.31 - 1.90
1.91 - 2.80


Best Opportunities for Freshwater Conservation
Nooksack River
Stillaguamish River
Methow River
Little Pend Oreille River
Ozette Lake
Sauk River
Hoh River
Dosewallips River
Queets River
Hamma Hamma River
Wenatchee River
Copalis River
Swanson Scablands
Turnbull Scablands
Satsop River
Lower Chehalis
Naches River
Nisqually River
Naselle River
Grays River
Elochoman River
Tucannon River
Asotin Creek
East Fork Lewis River

Advisory Board

- Dr. Robert Bilby (UW and Weyerhaeuser)
- Dr. Susan Bolton (UW)
- Carol Cloen (DNR, Aquatic Resources)
- Dr. Rex Crawford (DNR Heritage)
- Dr. Peter Kiffney (NOAA Fisheries)
- Kirk Krueger (WDFW)
- Rob Plotnikoff (Ecology)
- Dr. Ashley Steel (NOAA Fisheries)
- Dr. Brad Thompson (WDFW)

Experts

- WDFW regional biologists
- NOAA Fisheries
- USFW research stations
- National Parks
- NGOs
- University of Washington
- Eastern Washington University

The Nature Conservancy

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