



PHOTO BY DANNY RAPHAEL



Snoqualmie Watershed 10-year Status Report: Real Progress, Real Challenges

Snoqualmie Watershed Forum: November 16, 2016

Presentation outline

- Brief summary of Salmon Plan and how it informed the 10-year Status Report
- Purpose and intent of the 10-year Status Report
- Key take-home points from each area of the report
- Recommendations



Salmon Plan process

- 1999 - Chinook and bull trout listed under ESA
- 2005 - Science-based Salmon Plan adopted locally
 - *Restoration goals for nearshore, estuary, rivers and uplands*
- 2007 – Puget Sound Chinook Plan adopted by feds
- 2015 - Snohomish Basin Protection Plan adopted
- 2017 - Anticipated Salmon Plan update



Status Report purpose

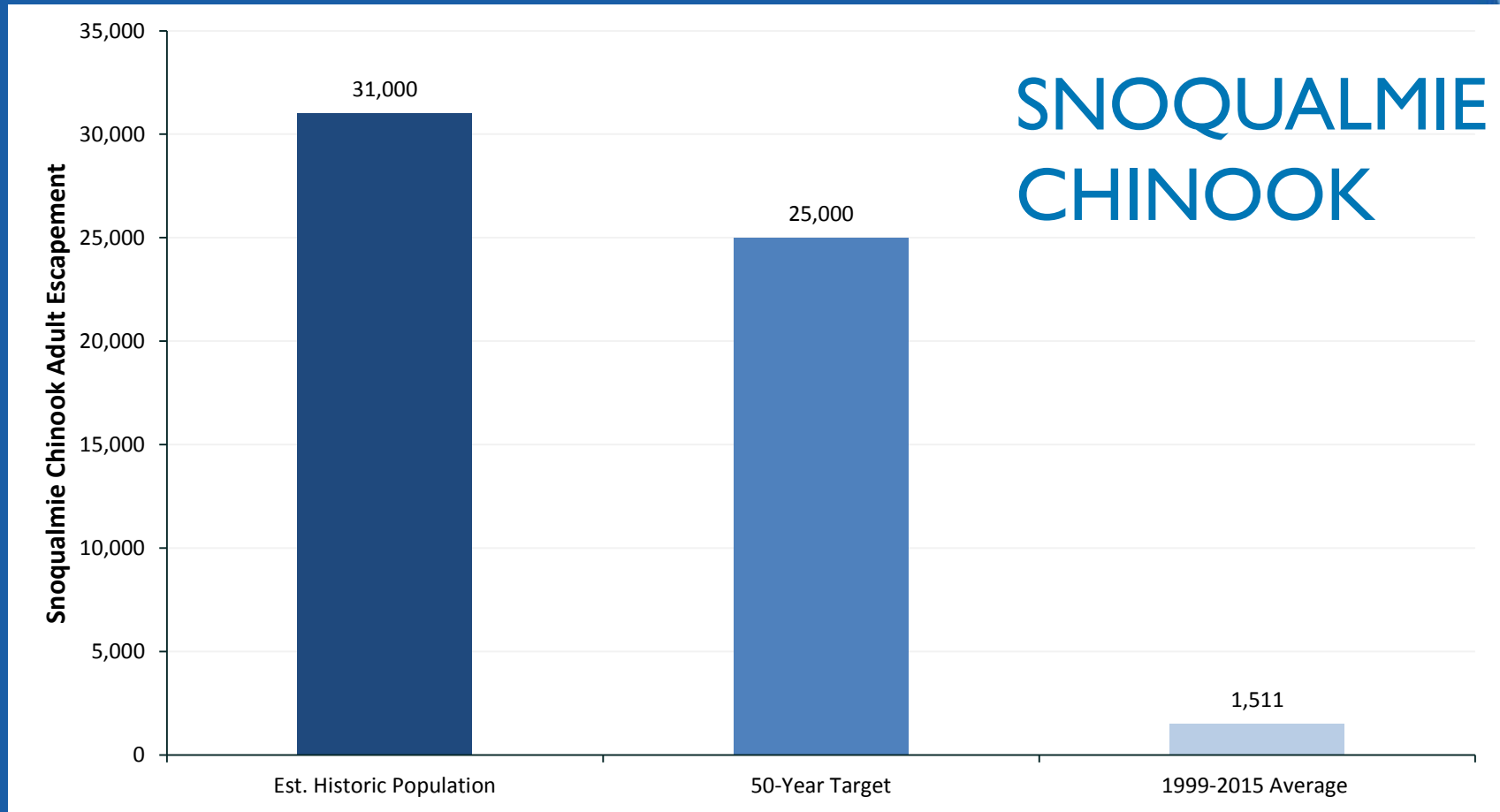
- Assess status of 10 year milestones set out in the Salmon Plan
 - *Trends in salmon populations*
 - *Monitoring*
 - *Progress on habitat restoration*
 - *Progress on habitat protection*
- Priorities for the next 10 years of salmon recovery



How are salmon doing?



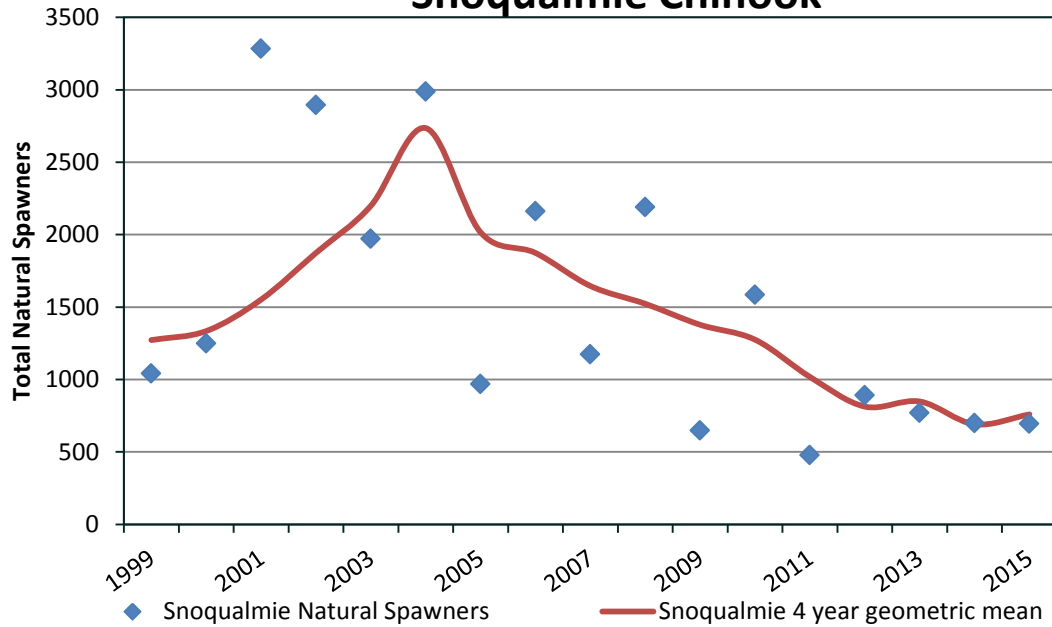
Escapement numbers



The average population between 1999-2015 is 4.8% of historic levels and 6% of the 50 year target set in 2005.

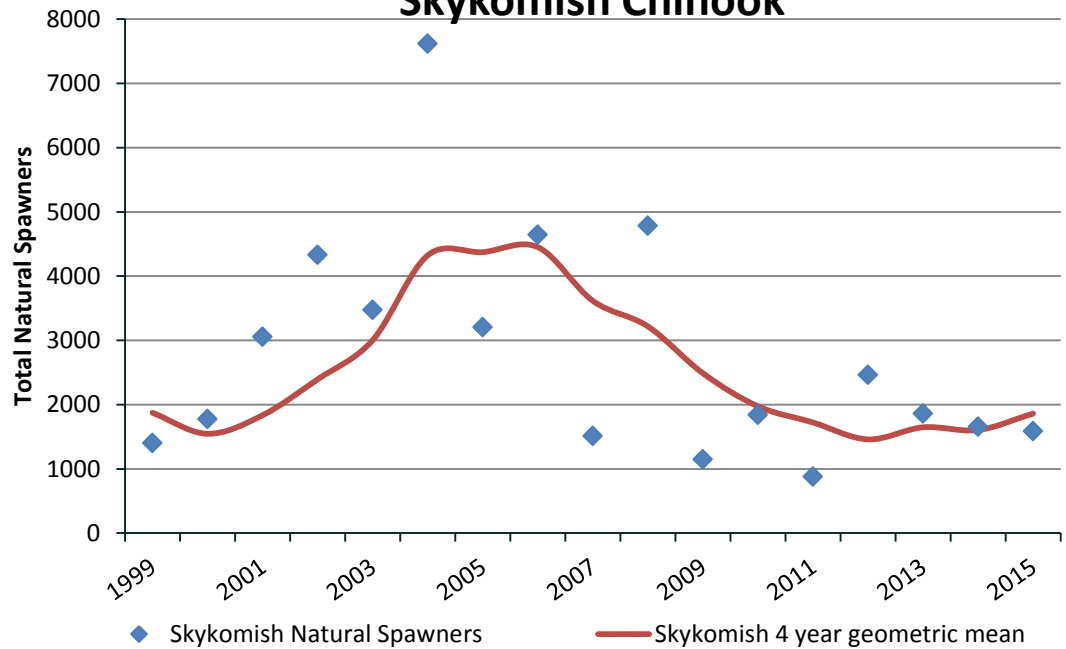


Snoqualmie Chinook

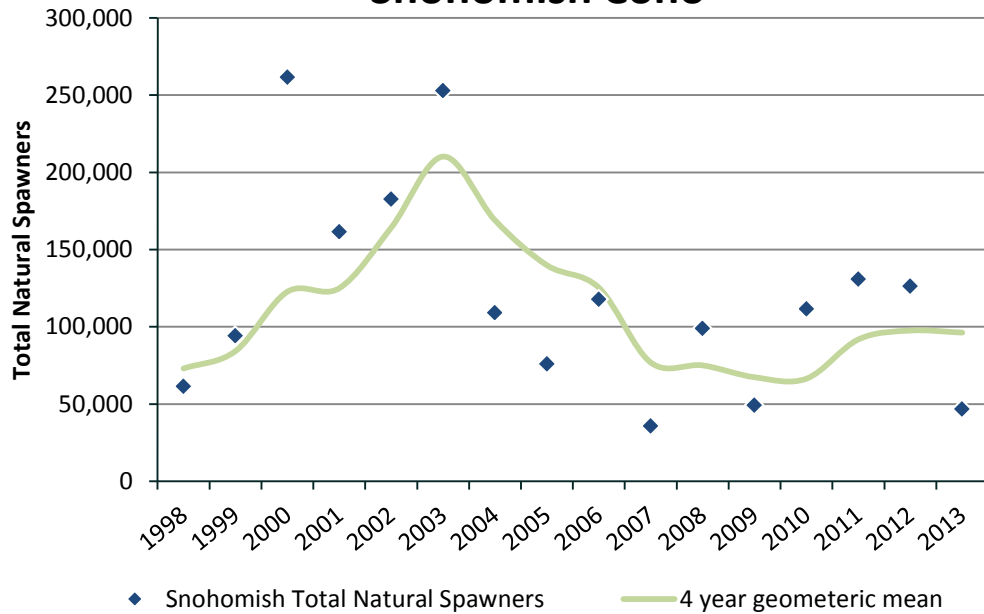


Chinook populations are static at best and declining at worst.

Skykomish Chinook



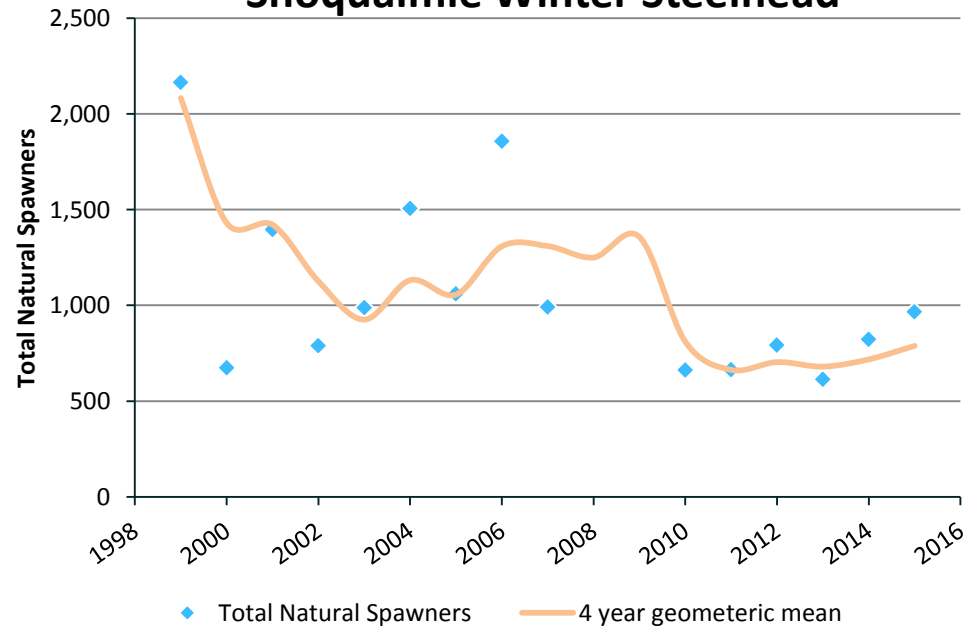
Snohomish Coho



2015 saw the lowest coho return in 50 years.

Steelhead spend a long time in the rivers and are particularly vulnerable to habitat loss and damage.

Snoqualmie Winter Steelhead



Monitoring efforts

- Ongoing monitoring
 - *King County restoration project monitoring*
 - *King County water quality assessment*
 - *Tulalip Tribes' smolt trap*
- One-time monitoring
 - *Fish passage assessment*
 - *Water quality studies*
 - *Benefits of habitat complexity*
- Periodic efforts
 - *Riparian conditions*
 - *In-stream habitat conditions*



Future monitoring needs

- Continue to support “fish in, fish out”
- Continue to support restoration effectiveness monitoring
- Better understand temperature patterns
- Be responsive to monitoring needs
- Be responsive to routine assessments



Key points

- At worst, fish populations are declining; at best, they are static.
- Monitoring is giving us critical information to track our progress.
- We can't control ocean conditions; provide best possible freshwater habitat.



Habitat restoration: Progress and challenges



Lower Tolt Project: Before 2009 levee/road removal



Lower Tolt Project: 2015 after construction



Progress toward 10-year goals is mixed

Sub-basin Strategy Group: Restored Habitat	10 Year Goals	2005-2015 Progress
Nearshore Beaches and Shoreline <i>(in Snohomish County)</i>	At least 1 mile	.57 mile (57%)
Estuary: Tidal Marsh <i>(in Snohomish County)</i>	1,237 acres	836 acres (68%)
Mainstem River: Edge <i>(in King County)</i>	5.2 miles	1.9 mile (37%)
Mainstem River: Off-Channel <i>(in King County)</i>	84 acres	6.6 acres (8%)
Mainstem River: Floodplain Acres Reconnected <i>(in King County)</i>	No target defined	337 acres
Mainstem River: Riparian <i>(in King County)</i>	128 acres	164 acres (128%)
Mainstem: Large Wood Jams <i>(in King County)</i>	20 new jams	18 jams (90%)
Mainstem: Floodplain Large Wood Jams <i>(in King County)</i>	No target defined	13 jams

Snohomish partners may achieve goal in 2017

Significantly behind 10-year goal

Achieved or nearing 10-year goal



Stillwater Levee Removal Project – Wild Fish Conservancy

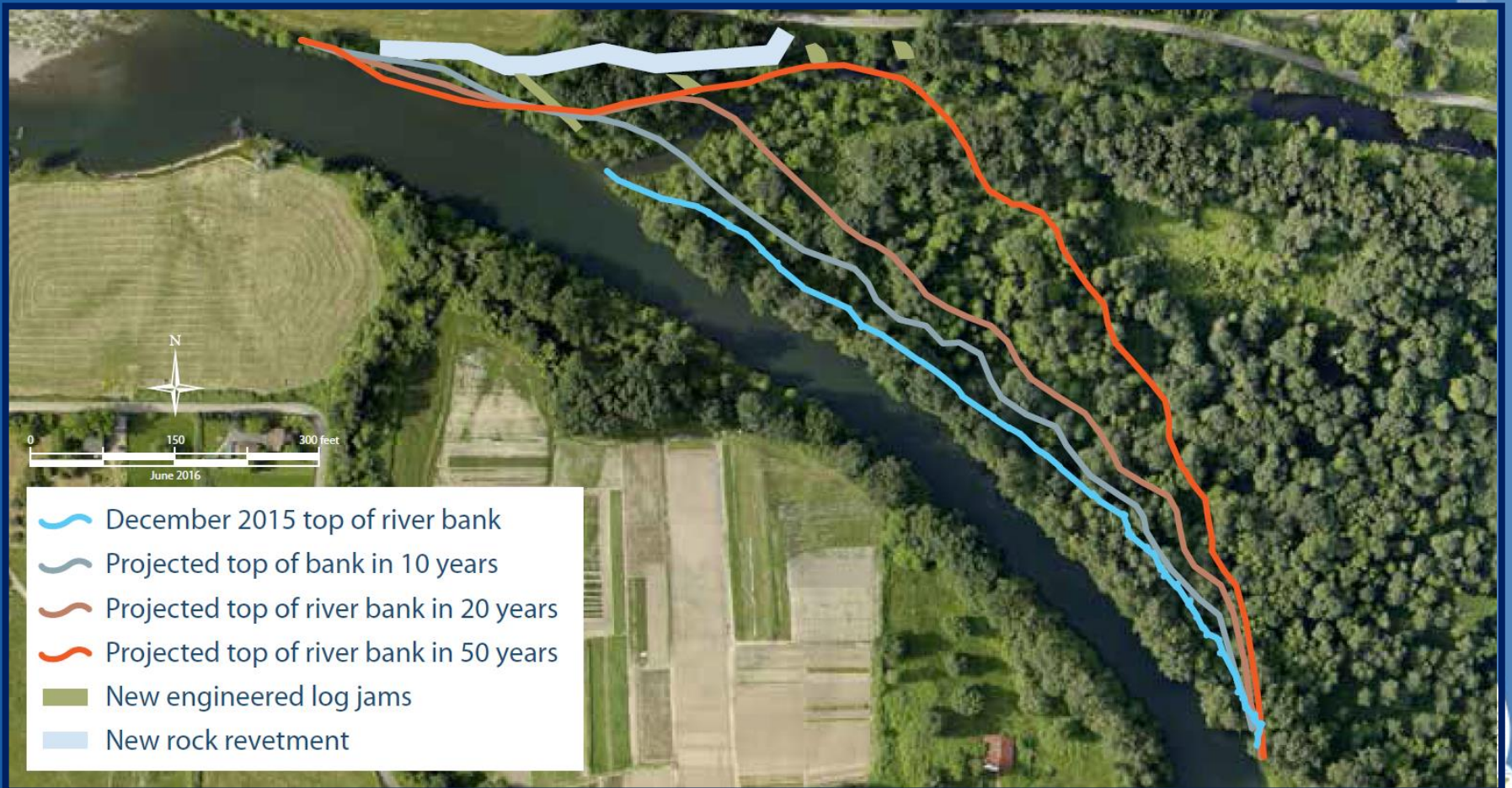
Progress toward 10-year goals is mixed

Sub-basin Strategy Group: Restored Habitat	10 Year Goals	2005-2015 Progress
Mainstem Secondary: Riparian	3 acres	0 acres
Mainstem Secondary: Off-channel	3 acres	0 acres
Cherry Creek: Riparian	7 acres	13 acres (185%)
Cherry Creek: Off-channel	5 acres	1.5 acres (30%)
Rural Secondary: Off-channel (Patterson, Ames, Harris Creeks)	21 acres	0 acres
Rural Secondary: Riparian (Patterson, Ames, Harris Creeks)	No target defined	20.3 acres
Headwaters: Riparian (Upper Valley)	No target defined	58.5 acres

Mixed progress on second tier streams and headwaters

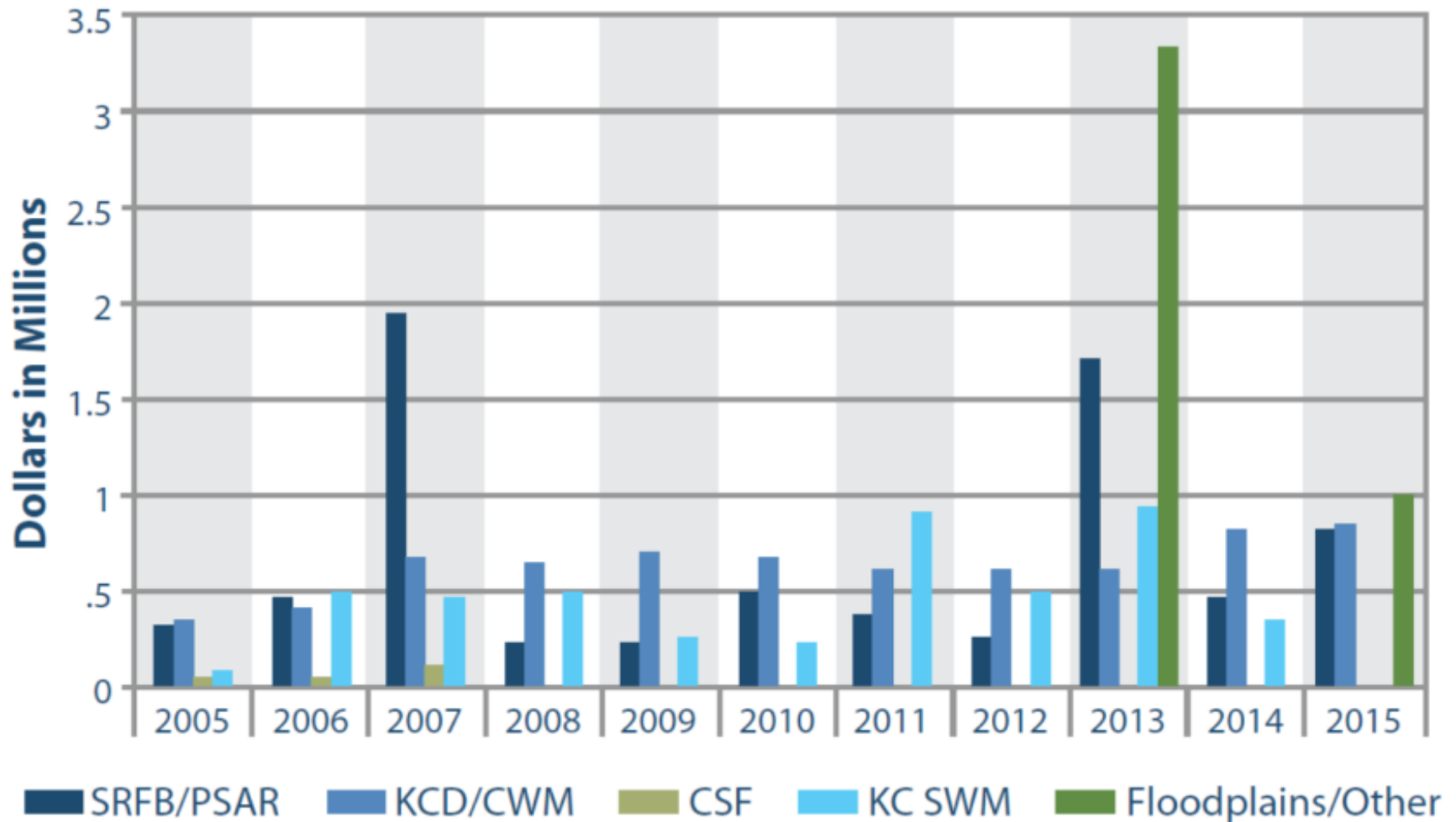


The future is here: Multi-objective projects



Upper Carlson Floodplain Restoration Project

Restoration funding: External sources increase...



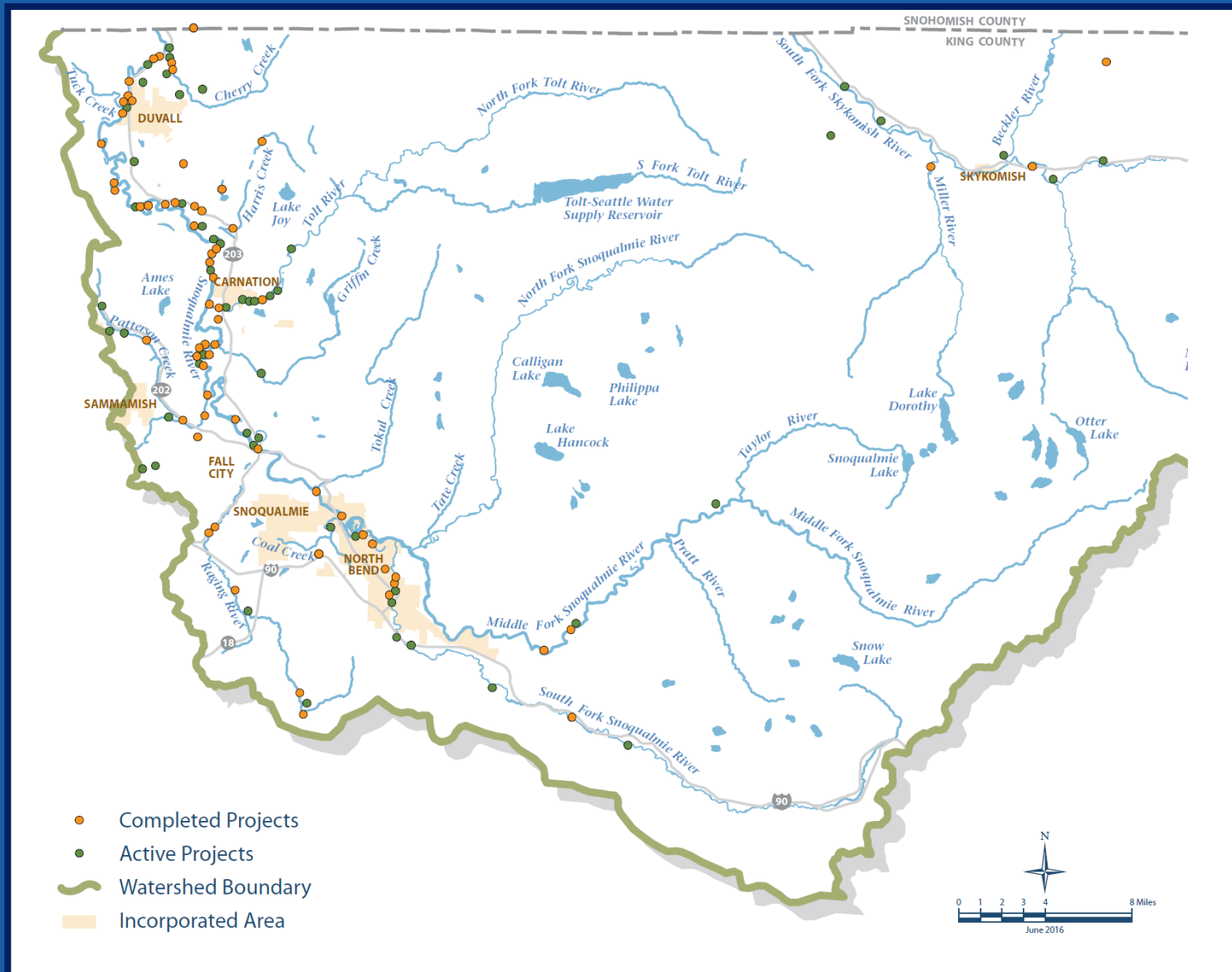
...but organizational capacity lags

- With increases in Floodplains by Design and PSAR, we still lack operating funding for:
 - *Project managers, watershed stewards, acquisition experts, planners, outreach professionals*
 - *Monitoring and maintenance needs*



South Fork Skykomish Restoration Report

The next 10 years of restoration projects



Protection

- Building on existing programs
 - *Incentive, easement, acquisition, regulatory programs*
- Snohomish Basin Protection Plan adopted 2015
 - *Priority areas for watershed hydrology*
 - *High value land protection tools*
 - *Considers climate change*
 - *Implementation strategy & funding still needed*



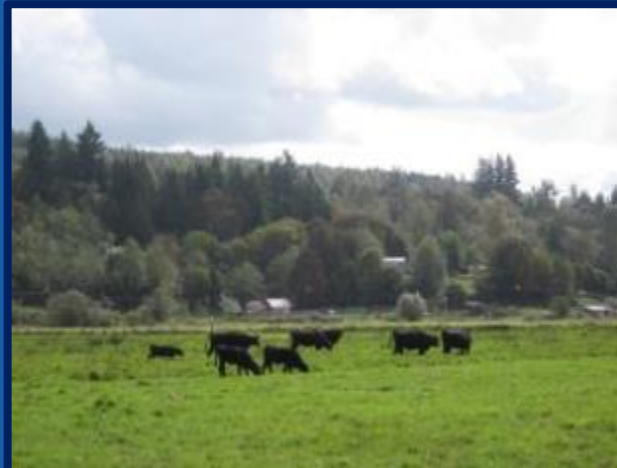
Protection spotlight

- City of Duvall Watershed Plan success
 - *Open space, forest cover, land use, salmon, and stormwater*



Fish, Farm, Flood

- Key recommendation from 5-year Status Report
- Fish Farm Flood Advisory Committee (2013-2016)
- Agreement in Principle – May 2016
- Implementation phase – 2017 and beyond



Success and future challenges: key points

- *Leverage multi-objective projects*
 - *Floodplains by Design*
- *Build on early Fish, Farm, Flood agreements*
 - *Large capital salmon projects, drainage improvements, etc...*
- *Advocate for more funding*
- *Increase implementation capacity*
 - *Build staff capacity to meet the increase in available funding*



Miller River washout since 2011

Success and future challenges

- Protect watershed hydrology
 - *Implement Protection Plan*
- Communicate successes/issues to public
 - *Increase public understanding*
- Plan for climate change/increase resiliency
 - *Build resilient projects and communities*



Partnerships are strong...

But the next 10 years are critical



Questions?

