

Columbia River Coldwater Refuge/Thermal Angling Sanctuary Update

11 October 2019

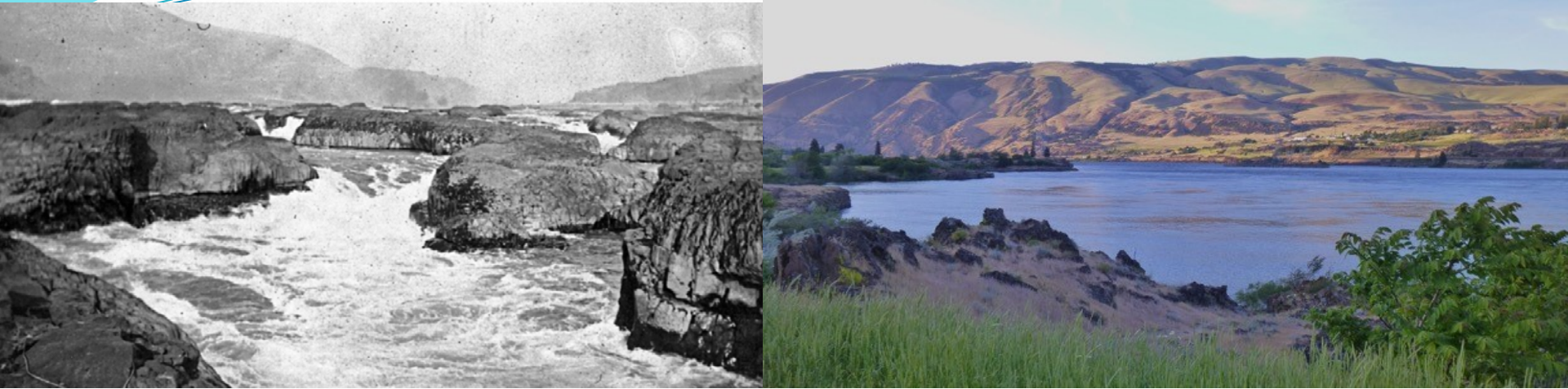
Oregon Department of Fish and Wildlife



Outline for Today

- Background
- Status of EPA work
- Columbia River process
- Potential Management Actions
- Inter-jurisdictional coordination
- ODFW statewide update

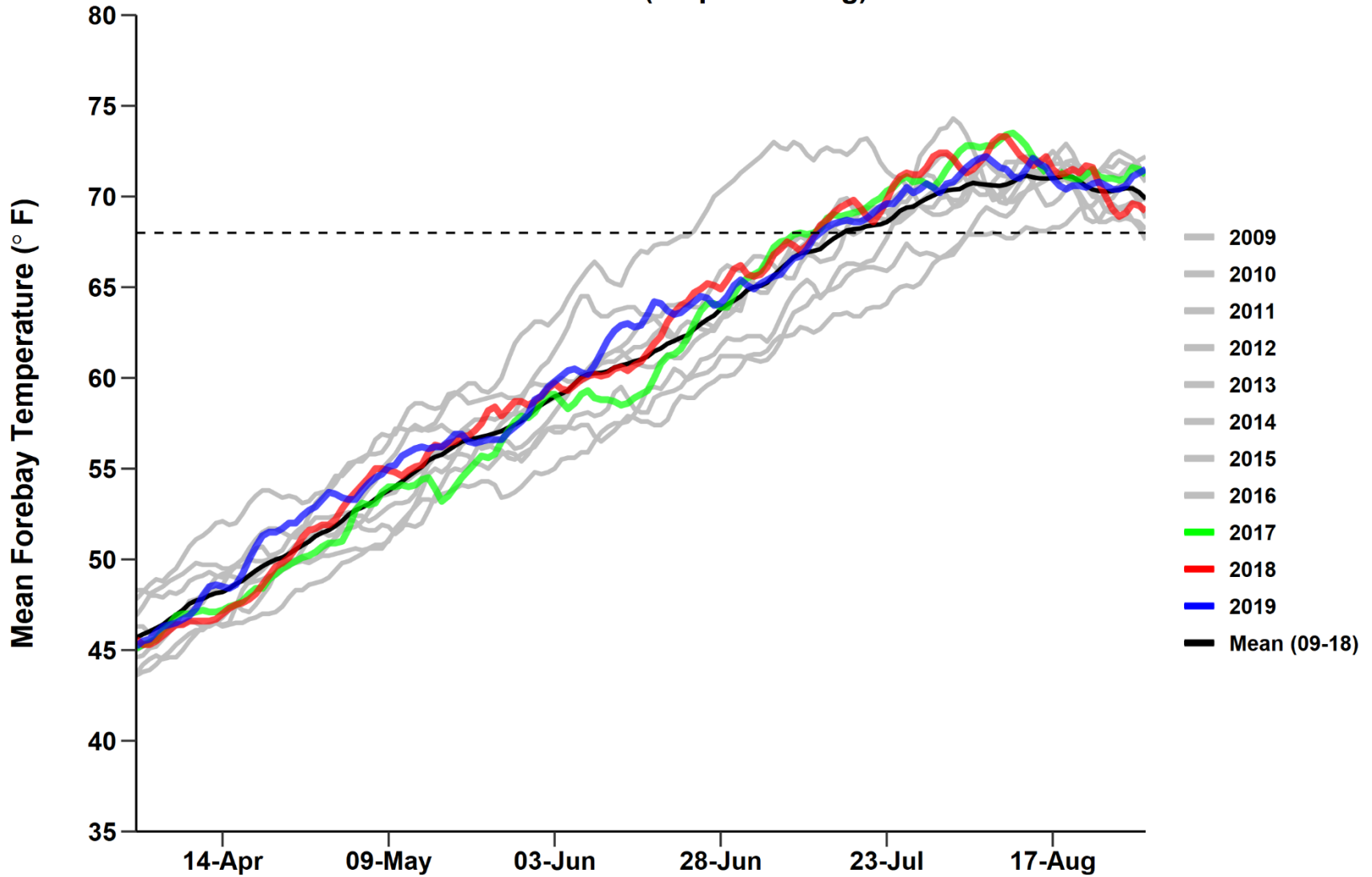
Background



- Salmon and steelhead generally require cold rivers and streams to support their diverse life histories
- But, have evolved and thrived in systems (including the Columbia) where temperatures were above optimal at some times/locations
- Changes to the Columbia River have altered the spatial and temporal thermalscape, increasing exposure to suboptimal temps for some runs
- The impact of this increased exposure on spawning success is uncertain, but is likely variable and a function of multiple factors.

Background

Bonneville Dam (1 Apr – 31 Aug)



Background

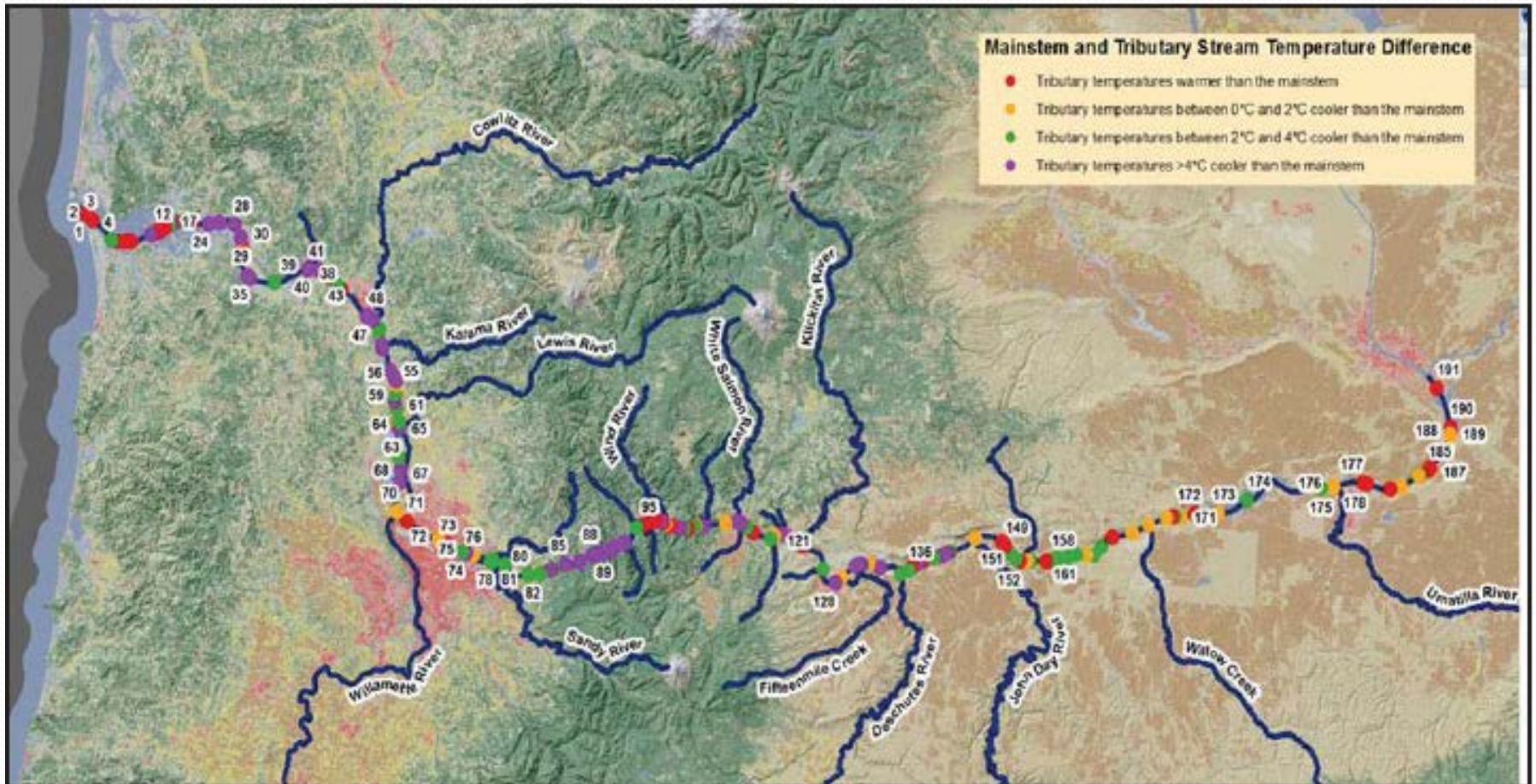
- Late spring/early summer 2015 water temps significantly above 10-year average

Under climate change

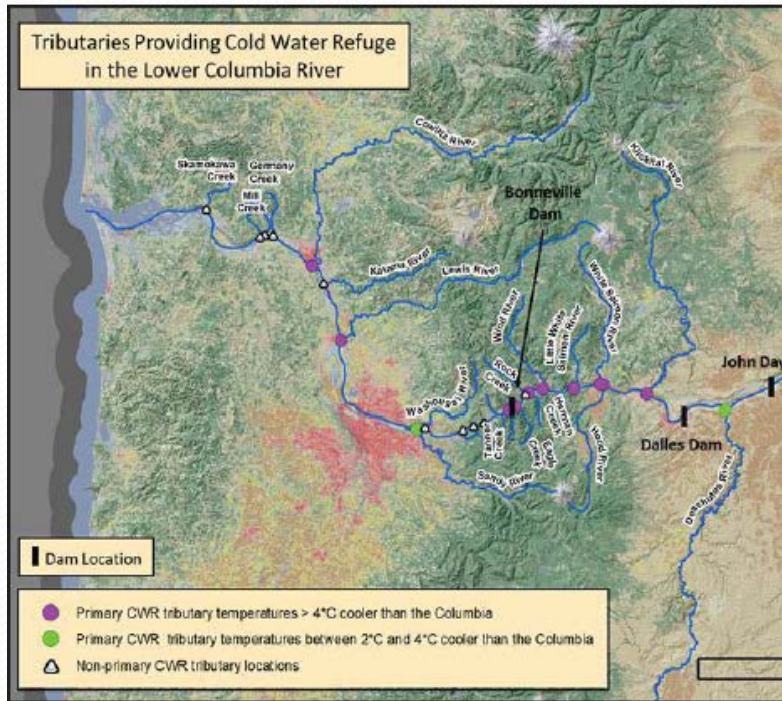
- Changing future precipitation trends
- Declining average snow packs
- Noticeable effects likely by the 2030s
- ODFW expects “abnormal” events to become more frequent

EPA Work

Final Draft EPA Columbia River Coldwater Refuges Plan released for comment 3 October 2019



EPA Work



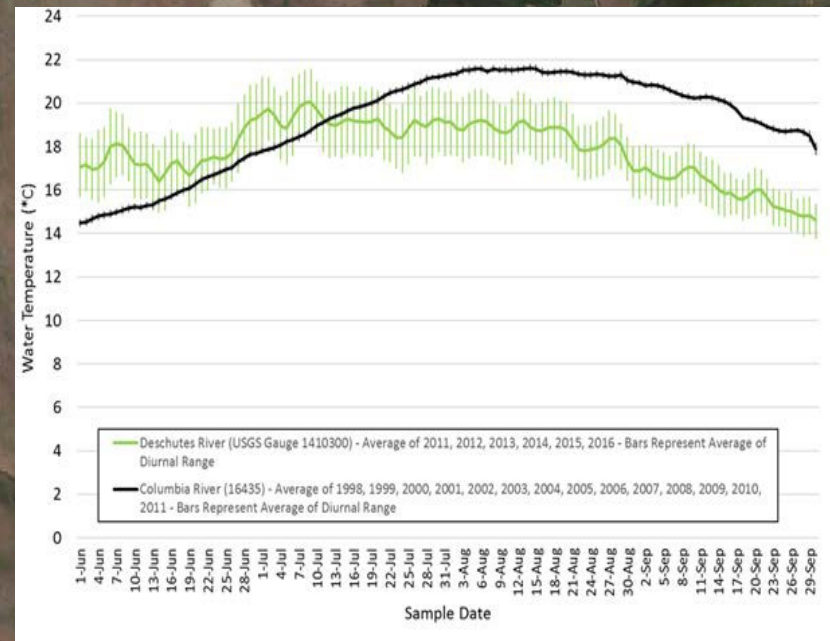
| Tributary | State | River Mile |
|-----------------------|------------|------------|
| Cowlitz River | Washington | 65.2 |
| Lewis River | Washington | 84.4 |
| Sandy River | Oregon | 117.1 |
| Tanner Creek | Oregon | 140.9 |
| Eagle Creek | Oregon | 142.7 |
| Herman Creek | Oregon | 147.5 |
| Wind River | Washington | 151.1 |
| L. White Salmon River | Washington | 158.7 |
| White Salmon River | Washington | 164.9 |
| Hood River | Oregon | 165.7 |
| Klickitat River | Washington | 176.8 |
| Deschutes River | Oregon | 200.8 |

EPA Work

135_Deschutes River

880,000 m³ CWR volume

Deschutes River CWR

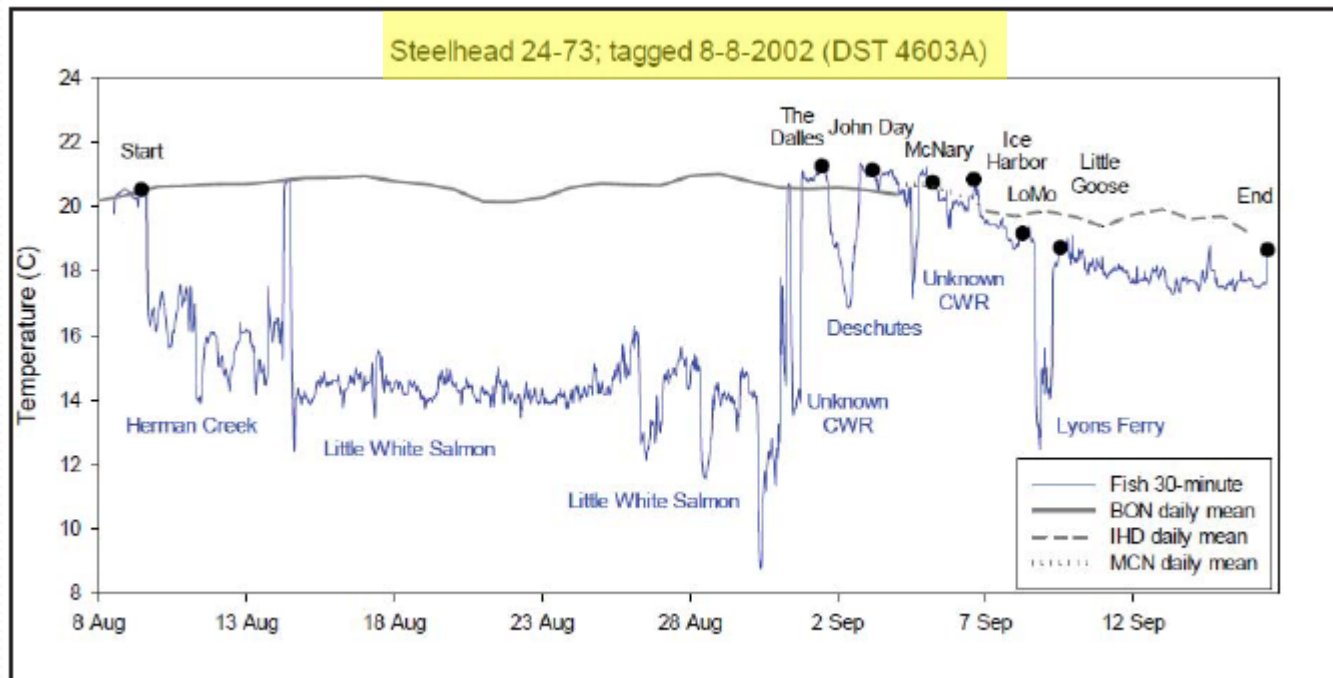


135_UPB



EPA Issues

- Much of the EPA fish information is from 1999-2002
- Major systemic changes occurred since.
- These changes have significantly decreased stray rates both system-wide and especially in the Deschutes
- Fish behavior may be different now
- Basing decisions on old data may have unintended consequences

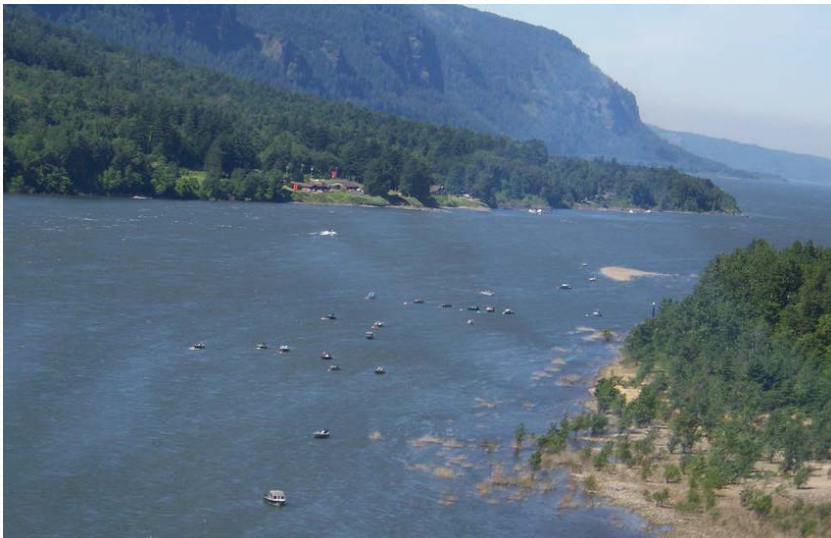


ODFW Process – Timeline to date

- November 2017 – EPA Region 10 sponsored public workshop on Columbia River CWR
- March 2018 – Director's report to the OFWC on November 2017 workshop
- June 2018 – OFWC Agenda Item I details planned ODFW process for Thermal Angling Sanctuaries
- August 2018 – OFWC directs staff to implement TAS at the mouth of the Deschutes
- January 2019 – Public meeting in The Dalles (invited by the Gorge chapter of CCA).
- August 2019 – OFWC directs staff to implement TAS at the mouth of the Deschutes – Staff uses input from January public meeting to refine boundary
- October 2019 – EPA releases final draft CWR plan comments due December 3, 2019

ODFW Process

- CR fisheries management is complex
- Majority of recreational wild steelhead impacts accrue upstream of Bonneville
- Oregon tributaries downstream of Bonneville are less critical (i.e., volume, habitat configuration, use)
- EPA CWR document will provide input
- Thorough public vetting of potential options.



Potential Management Actions

Recreational

Reduced bag limit
Rolling retention closures
River-wide retention closure
No boat limits
Thermal angling sanctuaries
Mainstem angling closures

Commercial

Shift opener timing
Reduce # openers
Reduce duration
Reduce soak times
Gear restrictions
Fishery closures

Effectiveness of Actions?

| Tributary | Year | Hatchery Steelhead | | Wild Steelhead | | # | # |
|-----------|-----------|--------------------|----------|----------------|----------|-------|---------|
| | | Kept | Released | Kept | Released | Boats | Anglers |
| Deschutes | 2016 | 78 | 11 | 0 | 100 | 279 | 726 |
| | 2017 | 0 | 0 | 0 | 2 | 207 | 531 |
| | 2018 | 0 | 0 | 0 | 0 | 35 | 92 |
| | 2019 | 0 | 13 | 0 | 2 | 473 | 1285 |
| | Sub-Total | 78 | 24 | 0 | 104 | 994 | 2634 |

ODFW Process – Conceptual Matrix

| | Large abundance | Moderate abundance | Low abundance | Very low abundance |
|----------------------|-----------------------------------|------------------------------|-----------------------------------|-----------------------------------|
| Normal conditions | Measures to ensure $\leq 2\%$ ESA | | Moderate additional restrictions | Mod-High Additional restrictions |
| Poor conditions | Moderate additional restrictions | | High Additional restrictions | Very high additional restrictions |
| Very poor conditions | Moderate additional restrictions | High Additional restrictions | Very high additional restrictions | |

ODFW Process – Public Meetings

| Meeting # | Proposed Date | Location |
|-----------|---------------|-----------------|
| 1 | January 2020 | The Dalles |
| 2 | January 2020 | Hood River |
| 3 | January 2020 | Portland Metro |
| 5 | TBD | The Dalles* |
| 6 | TBD | Hood River* |
| 7 | TBD | Portland Metro* |

Target April 2020 for Commission rule making

* Second round meetings held if needed.

Interjurisdictional Coordination

- The CR, from Buoy 10 to the Oregon/Washington state line upstream of McNary Dam, is jointly managed
- Half (6) of the 12 priority CWR are in Washington
- While we can implement as an “Oregon Only” action, joint state coordination will be helpful

Statewide update

- In addition to the Columbia River work we are doing, the agency is embarking on a statewide look at water temperature and flow issues.
- Climate change represent a serious and immediate threat to fish and wildlife.
- As part of the strategic plan, the agency has placed a focus on providing leadership to address climate change.

Statewide update

What will this statewide policy/leadership do?

- Revise our monitoring programs to track appropriate climate-related metrics.
- Identify climate resilient assets and mitigation opportunities.
- Focus research to resolve key uncertainties
- Incorporate this information into our management strategies both at the long term time scale in developing management strategies.

Conclusions and future plans

- EPA recently (last week) released a final draft of their CWR plan for public review;
 - ODFW and Fish Passage Center Staff are currently reviewing that document
- Recommend folding useful/appropriate EPA products into public and rulemaking processes
- Tentatively plan to bring Columbia River plan to the Commission for rulemaking in April of 2020.
- ODFW climate and ocean change policy this winter
- Stay tuned as we develop a framework for dealing with temperature issues statewide.



QUESTIONS?