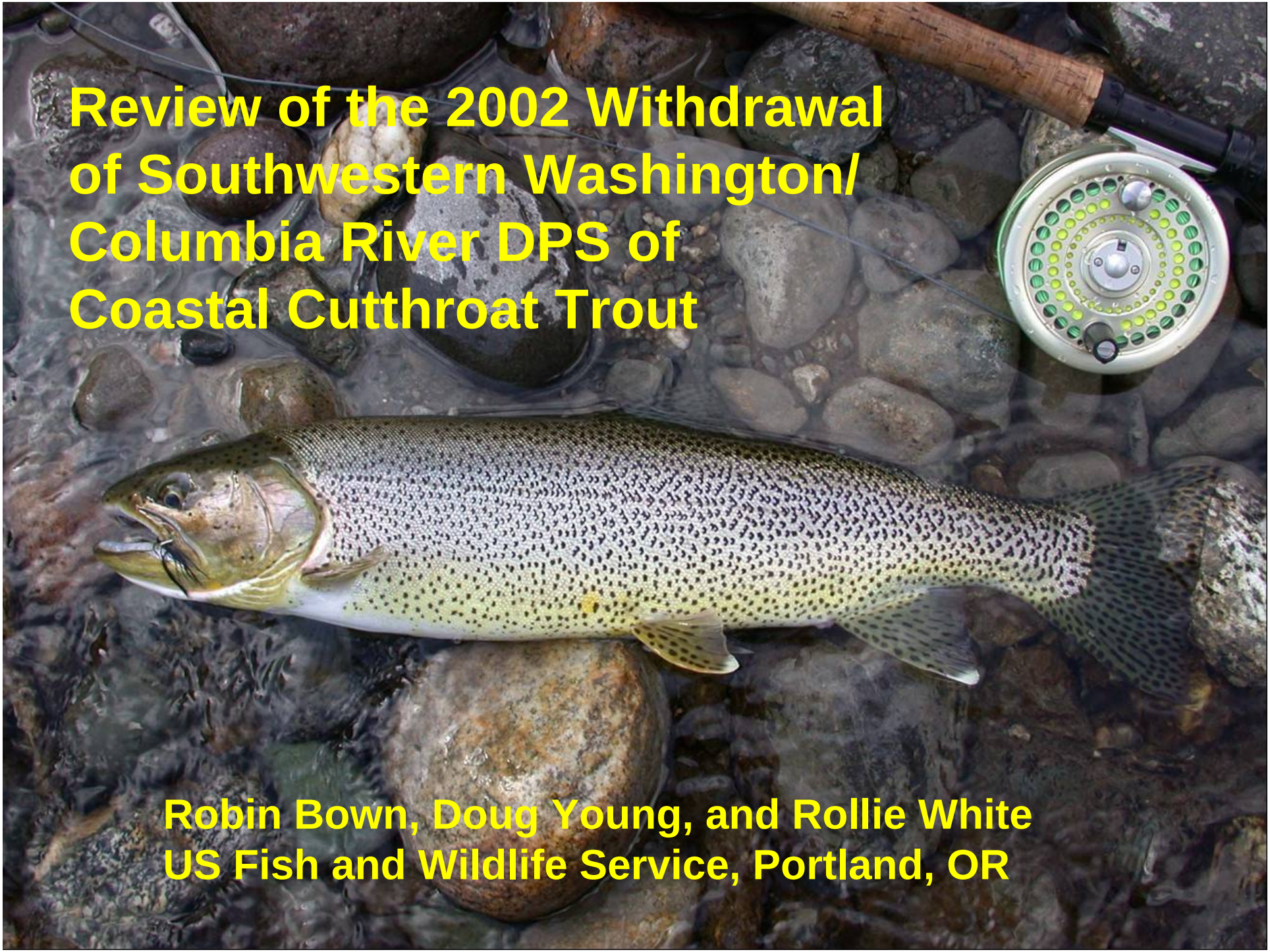

Review of the 2002 Withdrawal of Southwestern Washington/ Columbia River DPS of Coastal Cutthroat Trout

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Review of 2002 CCT Withdrawal Decision Endangered Species Act Overview

- Keystone Federal law designed to prevent the extinction of species
  - "safety net" for species
  - tool of "last resort", not general management tool for declining species
  - protections apply only to species meeting the "high standards"

Review of 2002 CCT Withdrawal Decision Endangered Species Act Overview

- Endangered species are defined as “any species which is **in danger of extinction** throughout all or a significant portion of its range.”
  - Imminent risk
  - Complete extinction
  - Forward looking

Review of 2002 CCT Withdrawal Decision Endangered Species Act Overview

- A Threatened species is defined as "any species which is likely to become an endangered species **within the foreseeable future** throughout all or a significant portion of its range."

Review of 2002 CCT Withdrawal Decision USFWS Process

- Early 2000, FWS chartered review team
- Accumulated, analyzed and reviewed all existing and new information
- Information, conditions, and threats driving the 1999 Proposal to list had changed

Review of 2002 CCT Withdrawal Decision Decision Process Summary

- reached the unanimous recommendation that the species no longer met the definition of a threatened species

- Four categories of new or re-analyzed information
  - population numbers
  - population trend
  - life history plasticity
  - changes in regulations and protections

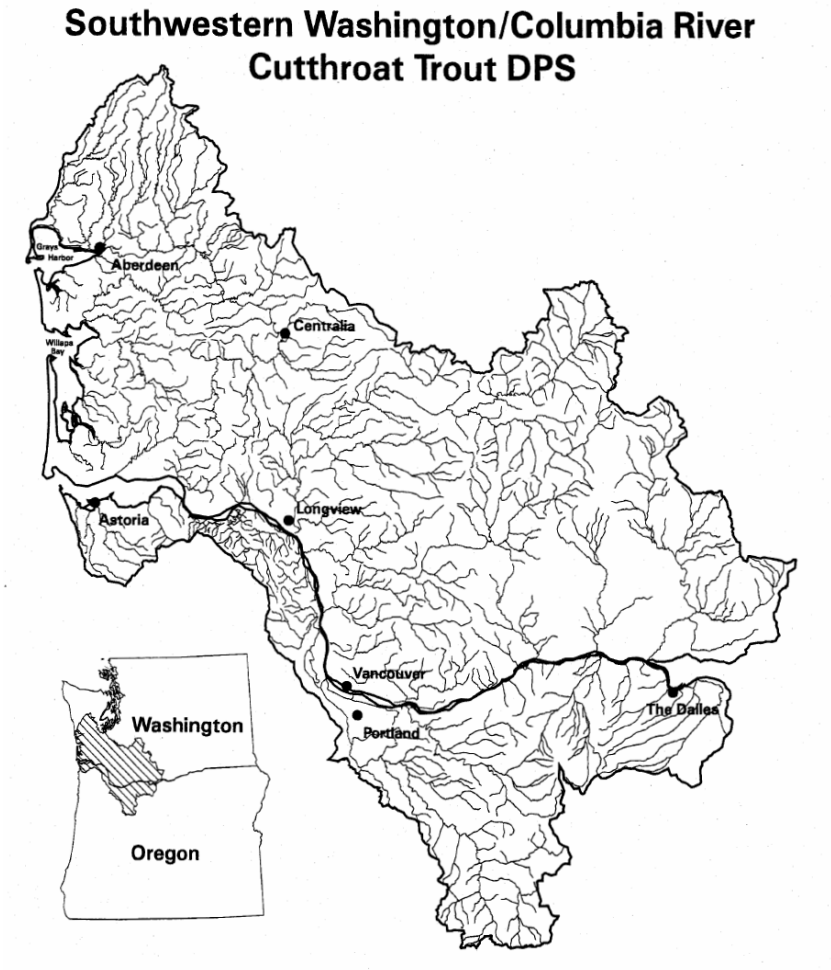
Review of 2002 CCT Withdrawal Decision Decision Process Summary

- DPS has includes all life history strategies

  resident

  freshwater migrants

  anadromous migrants



Review of 2002 CCT Withdrawal Decision Population Analysis

- FWS team reviewed cutthroat population numbers and trends based on Status Review data and new information from traps and surveys
  - Very few long-term data sets available
  - Little trap efficiency or effort data for CCT
  - Limited to evaluating indices
  - All trap data from within the “anadromous zone”

Review of 2002 CCT Withdrawal Decision Population Size

- Lack of efficiency information limited estimates
- Proposal - extremely low population size of anadromous cutthroat based on trap counts in Columbia River, consistently below 10 fish annually
- Withdrawal - Raw population numbers at 5 of 9 traps from 50 to 1400 anadromous cutthroat annually
  - 1 of the 4 remaining known to miss many cutthroat.

Review of 2002 CCT Withdrawal Decision Population Size

- Proposal - very low anadromous cutthroat populations in the Sandy and Hood Rivers in Oregon -- indicative of near extinctions of anadromous cutthroat runs

- Withdrawal - Still low numbers in the areas measured by these traps (< 6% of DPS), resident populations considered healthy

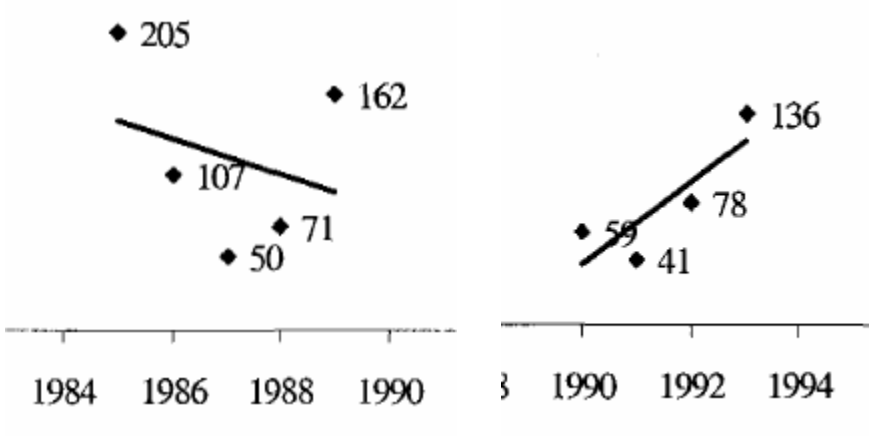
Review of 2002 CCT Withdrawal Decision Resident Population Size

- Proposal – no specific information on residents, thought to be well distributed

- Withdrawal - WDFW survey of SW WA (75% of DPS) - population densities within and above anadromous “zone” comparable to/exceeding those in areas considered healthy and not likely to become endangered

Review of 2002 CCT Withdrawal Decision Population Trend Analysis

- Used regression similar to Status Review
- Calculated p and r^2 values – used with trap operation data to weight information in the decision process
- Limited ourselves to relatively long data sets due to high variability



2 “trends” – different time periods from the same trap – actual trend intermediate to these

Review of 2002 CCT Withdrawal Decision Population Trend

- Proposal – Trends in anadromous adults and outmigrating smolts in the SW Washington portion are all declining.

Location	age	Status Review	Withdrawal	Stats. Weight
Hoquiam R	Ad	- 5%/yr	+ 2.3%/yr	Poor fit
Bingham Cr	Ad	NR	+ 8%/yr	Fair fit
Grays Harbor	Ad	NR	+ 4 to 5%/yr	Corroborative
Stevens Cr	Juv	- 15%/yr	- 15%/yr	Good fit
Bingham Cr	Juv	No clear trend	No clear trend	Poor fit
Chehalis R	Juv	NR	+ 8.7%/yr	Fair fit

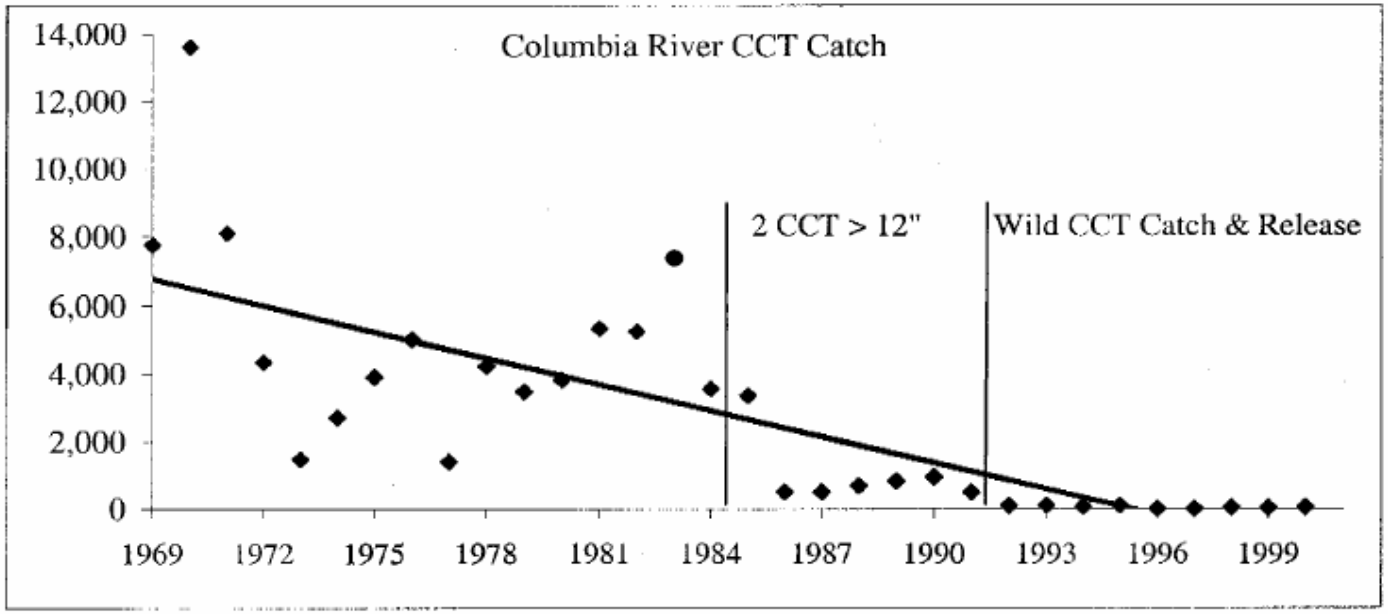
Review of 2002 CCT Withdrawal Decision Population Trend

- Proposal – Returns of anadromous cutthroat trout in almost all lower Columbia River streams declined markedly over the last 10-15 years.

Location	age	SR	Withdrawal	Stats. Weight
Elochoman	Ad	- 10.9%/yr	NA	Data gap prevents analysis
NF Toutle	Ad	+ 29.2%/yr	NA	Inconsistent operation
Kalama R	Ad	- 11.2%/yr	- 10.3%/yr	Good fit. Above anad zone
Kalama R	Juv	- 15.9%	NA	Data gap prevents analysis
Cowlitz R.	Juv	NA	inconclusive	Poor fit

Review of 2002 CCT Withdrawal Decision Population Trend

- Trends in recreational catch of cutthroat in Columbia River declining
- However, the data appears to mirror change in regulations and without effort data, cannot adjust for this bias



Review of 2002 CCT Withdrawal Decision Population Conclusion

- Anadromous portions of DPS likely lower than historic levels
  - may still be declining in some areas
- Resident portions of the DPS, especially SW WA, are well distributed and apparently in reasonable numbers. No trend data available

Review of 2002 CCT Withdrawal Decision Life History Potential

- Proposal - Well distributed fresh-water forms in relatively high abundance, if they can produce anadromous progeny, could mitigate risk to anadromous forms.
  - Issue: to what degree can non-anadromous CCT produce anadromous progeny?

- Proposal – limited information on whether the anadromous form represents a relatively discrete component or a “choice” depending on conditions and availability of resources

Review of 2002 CCT Withdrawal Decision Life History Potential – new information

- Withdrawal
  - Some new limited data that resident or long-term residualized fish can produce downstream migrants
  - Genetic data showing more similarity between life history strategies within drainages than between drainages
  - the irregular age of outmigration, and various lengths of stay in freshwater following return
  - evidence of similar plasticity in other trout species

Review of 2002 CCT Withdrawal Decision Changes in Regulatory Mechanisms

- Significant regulatory changes
  - 2 large HCPs (over 800,000 acres)
  - Washington revised Forest Practices Regs reduce future threats on over 30 % of the DPS through:
    - Reduced timber harvest in/around riparian areas
    - Restrictions on road construction, use, maintenance
    - Increased riparian buffer widths, reduced level of activities within buffers
    - increased portion of stream network requiring buffers

Review of 2002 CCT Withdrawal Decision Changes in Regulatory Mechanisms

- Regulatory Mechanisms
  - Northwest Forest Plan continues to improve aquatic habitat on 27 percent of the DPS

- at least 57 percent of the DPS's range now under management/regulations that
  - reduce the rate of future habitat impacts
  - provide for long-term improvement of coastal cutthroat trout habitat

Review of 2002 CCT Withdrawal Decision 5-Factor Analysis

- **Factor 1** - the present or threatened destruction, modification, or curtailment of its habitat or range
  - habitat and watershed conditions significantly impacted over the last 100 years.
  - Despite altered environments, cutthroat remain extant throughout historic habitat in the DPS
    - no significant “holes” in fish distribution
    - fish were reasonably abundant in many areas

Review of 2002 CCT Withdrawal Decision 5-Factor Analysis

- **Factor 2** - overutilization for commercial, recreational, scientific, or educational purposes
  - angling or commercial use of cutthroat trout not a significant threat in the DPS under current regulations
- **Factor 3** - disease or predation
  - no evidence of significant loss of wild cutthroat trout to parasites, disease, or predation

Review of 2002 CCT Withdrawal Decision 5-Factor Analysis

- **Factor 4** - inadequacy of existing regulatory mechanisms
  - Improved regulatory mechanisms in SW WA should reduce rates of future habitat impacts
- **Factor 5** - other natural or manmade factors
  - Some low levels of hybridization, may be natural, not a significant threat (localized)
  - Widespread distribution reduces the potential for losses from catastrophic events

Review of 2002 CCT Withdrawal Decision Listing Conclusion

- Based on the new information and re-analyses relative to
  - population size and trend
  - life history plasticity
  - new conservation efforts/regulatory mechanisms

- "Decision" team reached unanimous recommendation that the Southwestern Washington/Columbia River DPS **did not** meet the definition of a threatened species

  - Not likely to become an endangered species (in danger of extinction) in the foreseeable future

Review of 2002 CCT Withdrawal Decision
Cautionary Note

- A decision that the DPS does not qualify for listing under the ESA **does not** mean that there have been no effect on the species/habitat, or that the species is not in need of thoughtful management.

- identified the need for continuing/increased conservation efforts, improved monitoring efforts, and raised some research questions evaluations

Review of 2002 CCT Withdrawal Decision Research and Monitoring Needs

Examples of potential research

- relationship and interaction between different life history strategies
- begin collecting cutthroat-specific population data
  - Start long-term trend monitoring