NOAA FISHERIES
West Coast Region

The Endangered Species Act

Recovery and Delisting

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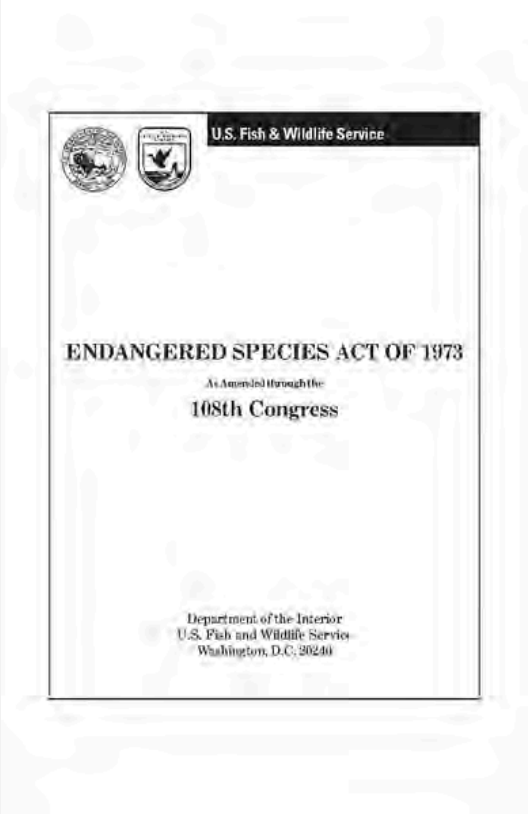
The Endangered Species Act – Recovery and Delisting

- How does a species get listed?
- What happens after a species is listed?
- How does a species get delisted?



U.S. Fish & Wildlife Service

ENDANGERED SPECIES ACT OF 1973

As Amended through the

108th Congress

Department of the Interior
U.S. Fish and Wildlife Service
Washington, D.C. 20240

Nothing is more priceless and more worthy of preservation than the rich array of animal life with which our country has been blessed.
– President Nixon, upon signing the Endangered Species Act

How Does a Species Get Added to the List?

- NMFS can initiate the process, but typically starts with a petition
- Conduct a status review
- Consider any ongoing conservation efforts
- Publish proposed and final determinations

Endangered means in danger of extinction throughout all or a significant portion of its range.

Threatened means likely to become an endangered species within the foreseeable future.

What is in a Status Review?

- Identify any DPSs or ESUs
- Demographic risk analysis – viable salmon populations (VSP)
  - *Abundance, productivity, spatial distribution, and diversity*
- Threats analysis – section 4(a)(1) of the ESA
  - *1) the present or threatened destruction, modification, or curtailment of its habitat or range*
  - *2) overutilization for commercial, recreational, scientific, or educational purposes*
  - *3) disease or predation*
  - *4) inadequacy of existing regulatory mechanisms*
  - *5) other natural or human-made factors*
- Overall extinction risk
  - *High, moderate, or low*
- If low overall, evaluate status within any significant portions of its range

What are the criteria for delisting?

ESA criteria for delisting:

1. Recovered to the point that it no longer needs the ESA's protections
2. New information suggests that the species is not actually endangered/threatened
3. The species has become extinct

ESA requirements for recovery plans

To the extent practicable, incorporate all of the following:

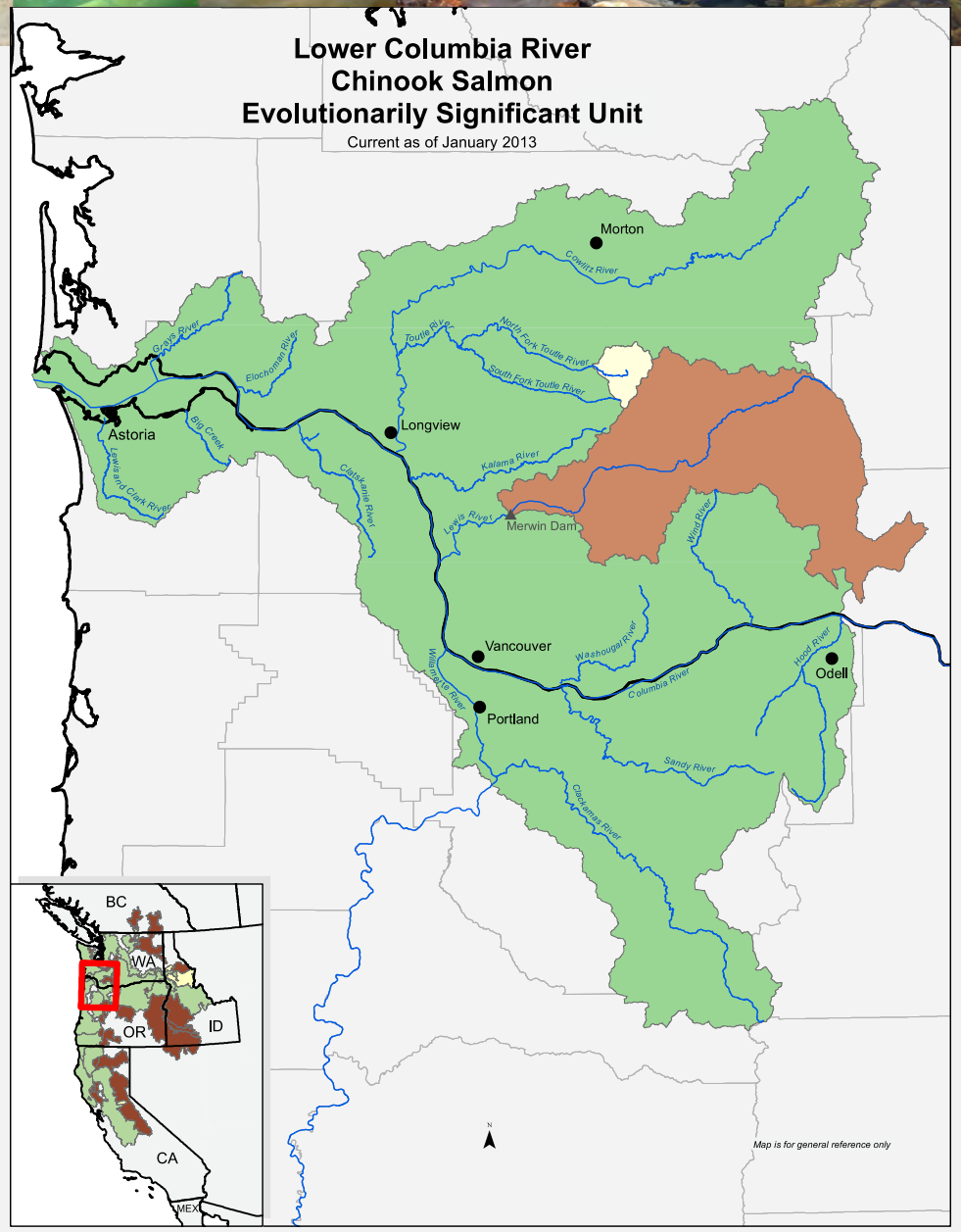
1. site-specific management actions
2. objective and measurable criteria
3. estimates of the time required and the cost

ESU/DPS	ESA Status	Year Listed	Recovery Plan	Recent Trend
Washington Coast				
Puget Sound Chinook salmon	T	03/1999	01/2007	Stable
Puget Sound steelhead	T	05/2007	Draft	Stable
Hood Canal summer-run chum salmon	T	03/1999	05/2007	Increasing
Ozette Lake sockeye salmon	T	03/1999	05/2009	Stable
Interior Columbia Basin				
Upper Columbia River spring-run Chinook salmon	E	03/1999	10/2007	Stable
Upper Columbia River steelhead	T	08/1997	10/2007	Increasing
Snake River fall-run Chinook salmon	T	04/1992	11/2017	Increasing
Snake River spring/summer-run Chinook salmon	T	04/1992	11/2017	Stable
Snake River sockeye salmon	E	11/1991	06/2015	Increasing
Snake River steelhead	T	08/1997	11/2017	Stable
Middle Columbia River steelhead	T	03/1999	11/2009	Stable
Willamette and Lower Columbia				
Columbia River chum salmon	T	03/1999	06/2013	Stable
Lower Columbia River Chinook salmon	T	03/1999	06/2013	Stable
Lower Columbia River coho salmon	T	06/2005	06/2013	Stable
Lower Columbia River steelhead	T	03/1998	06/2013	Stable
Upper Willamette River Chinook salmon	T	03/1999	08/2011	Decreasing
Upper Willamette River steelhead	T	03/1999	08/2011	Decreasing
Oregon Coast and Northern California				
Oregon Coast coho salmon	T	08/1998	12/2016	Increasing
Southern Oregon/Northern California Coasts coho salmon	T	05/1997	09/2014	Unknown
California Coastal Chinook salmon	T	09/1999	10/2016	Unknown
Northern California steelhead	T	06/2000	10/2016	Unknown
Central California Coast coho salmon	E	10/1996	09/2012	Unknown
Central California Coast steelhead	T	08/1997	10/2016	Unknown
California Central Valley				
Central Valley spring-run Chinook salmon	T	09/1999	07/2014	Stable
California Central Valley steelhead	T	03/1998	07/2014	Unknown
Sacramento River winter-run Chinook salmon	E	08/1989	07/2014	Stable
Southern California Coast				
South Central California Coast steelhead	T	08/1997	12/2013	Unknown
Southern California steelhead	E	08/1997	01/2012	Unknown

Lower Columbia River Recovery Plan
Biological Criteria

Generally:

- All strata have a high probability of persistence or a probability of persistence consistent with their historical condition.
- High probability of persistence is defined as:
  - Two or more populations have 95% or higher probability of persistence
  - Those populations are widely distributed
  - Other populations have persistence probabilities consistent with a high probability of stratum persistence



NMFS endorsed the recovery scenarios as one of multiple possible scenarios consistent with delisting.

The only exception being the Gorge fall and spring Chinook

Table 3-1

Recovery Scenarios for LCR Chinook, Columbia River Chum, LCR Steelhead, and LCR Coho

		Chinook						Chum				Steelhead				Coho	
		Fall		Late Fall		Spring		Fall		Summer		Winter[3]		Summer			
		Contribution[1]	Target[2]	Contribution	Target	Contribution	Target	Contribution	Target	Contribution	Target	Contribution	Target	Contribution	Target	Contribution	Target
COAST	Youngs Bay (OR)	S	L	--	--	--	--	S	VL	--	--			--	--	S	VL
COAST	Grays/Chinook (WA)	C	M+	--	--	--	--	P	VH	--	--			--	--	P	H
COAST	Big Creek (OR)	C	L	--	--	--	--	S	VL	--	--			--	--	S	VL
COAST	Eloch./Skam. (WA)	P	H	--	--	--	--	P	H	--	--			--	--	P	H
COAST	Clatskanie (OR)	P	H	--	--	--	--	P	H	--	--			--	--	P	VH
COAST	Mill/Aber./Ger. (WA)	P	H	--	--	--	--	P	H	--	--			--	--	C	M
COAST	Scappoose (OR)	P	H	--	--	--	--	P	H	--	--			--	--	P	VH
CASCADE	Lower Cowlitz (WA)	C	M+	--	--	--	--	C (Cowlitz)	M	C (Cowlitz)	M	C	M	--	--	P	H
CASCADE	Coweeman (WA)	P	H+	--	--	--	--					P	H	--	--	P	H
CASCADE	SF Toutle (WA)	P (Toutle)	H+	--	--	C (Toutle)	M					P	H+	--	--	P	H
CASCADE	NF Toutle (WA)			--	--							P	H	--	--	P	H
CASCADE	Upper Cowlitz (WA)	S (Upper Cowlitz)	VL	--	--	P	H+					P	H	--	--	P	H
CASCADE	Cispus (WA)			--	--	P	H+	--	--	--	--	P	H	--	--	P	H
CASCADE	Tilton (WA)			--	--	S	VL	--	--	--	--	C	L	--	--	S	VL
CASCADE	Kalama (WA)	C	M	--	--	C	L	C	M	--	--	P	H+	P	H	C	L
CASCADE	NF Lewis (WA)	P (Lewis)	H+	P	VH	P	H	P (Lewis)	H	--	--	C	M	S	VL	C	L
CASCADE	EF Lewis (WA)			--	--	--	--			--	--	P	H	P	H	P	H
CASCADE	Salmon (WA)	S	VL	--	--	--	--	S	VL	--	--	S	VL	--	--	S	VL
CASCADE	Clackamas (OR)	C	M	--	--	--[4]		C	M	--	--	P	H[6]	--	--	P	VH
CASCADE	Sandy (OR)	C	M	P	VH	P	H	P	H	--	--	P	VH	--	--	P	H
CASCADE	Washougal (WA)	P	H+	--	--	--	--	P	H+	--	--	C	M	P	H	C	M+
GORGE	Lower Gorge (WA/OR)	C[5]	M	--	--	--	--	P[5]	VH	--	--	P[5]	H	--	--	P[5]	H
GORGE	Upper Gorge (WA/OR)	C[5]	M	--	--	--	--	C[5] (Upper Gorge)	M	--	--	S[5]	L	P (Wind)	VH	P (U. Gorge/W. Salmon)	H
GORGE	White Salmon (WA)	C	M	--	--	C	L+			--	--	--	--	--	--		
GORGE	Hood (OR)	P	H[6]	--	--	P	VH			--	--	P	H	P	H[6]	P (U.Gorge/ Hood)	H[6]

[1] Indicates contribution to recovery: P = primary, C = contributing, S = stabilizing; for description, see Section 3.1.3.
[2] VL = very low persistence probability , L = low persistence probability, M = moderate persistence probability , H = high persistence probability, VH = very high persistence probability.
[3] Winter steelhead of the Coast stratum are included in the Washington and Oregon management unit plans for state-level planning purposes, but they are not included in this table because they are part of the unlisted Southwest Washington DPS, not the listed Lower Columbia River DPS.
[4] Clackamas spring Chinook are part of the Upper Willamette spring Chinook ESU.
[5] Designation for shared population based on WA objectives, with support to be provided by OR portion of population, since WA has a larger proportion of the population area.
[6] The Oregon management unit plan (ODFW 2010) notes that achieving this target status is highly unlikely for various reasons (see pp. 176-77, 186, 195, 200 of ODFW 2010).

LCR Chinook Salmon Threats and Recovery Strategy

Spring Chinook

- *Protect and improve the Sandy River population*
- *Reestablish populations above the Cowlitz and NF Lewis dams and in the White Salmon and Hood*
- *Protect tributary habitat and restore degraded habitat particularly in the upper subbasins*

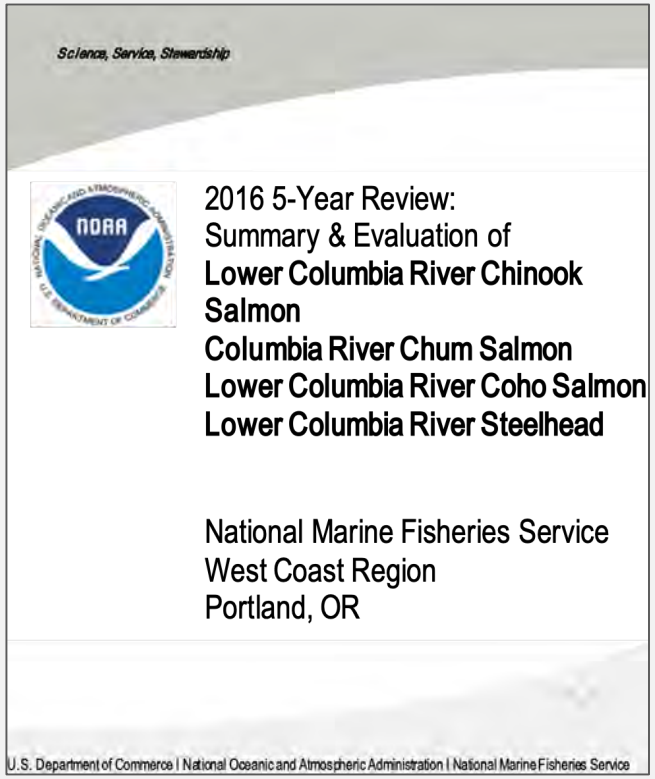
Fall Chinook

- *Protect and improve the Coweeman and Lewis populations*
- *Fill information gaps on extent of natural production and habitat quality/quantity*
- *Protect high-functioning habitat and improve quantity/quality of tributary and estuarine habitat*
- *Reduce influence of hatchery fish and harvest to allow for increases in natural production*

Late-Fall Chinook

- *Minimize the impacts of hatcheries*
- *Reduce harvest impacts*
- *Implement action in the regional tributary and estuary habitat strategy*

What did the 2016 5-year status review update say about Lower Columbia River Chinook?



The status review concluded that overall there has been little change:

- Majority of populations remain at high risk.
- Number of hatchery origin spawners remains high.
- Many returning unmarked adults are likely the progeny of hatchery origin parents.
- Dam removals have improved habitat conditions for some populations.
- Access to areas above dams has improved, but juvenile passage continues to be a problem.
- Continued land development and climate change will present long term challenges.

In Summary: How does a species get delisted?

- Similar to the listing process, we would first complete a status review
- We evaluate the demographic risks
- We evaluate the threats
- We would evaluate progress made on recovery plan actions
- Overall low demographic risk and threats have largely been addressed

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