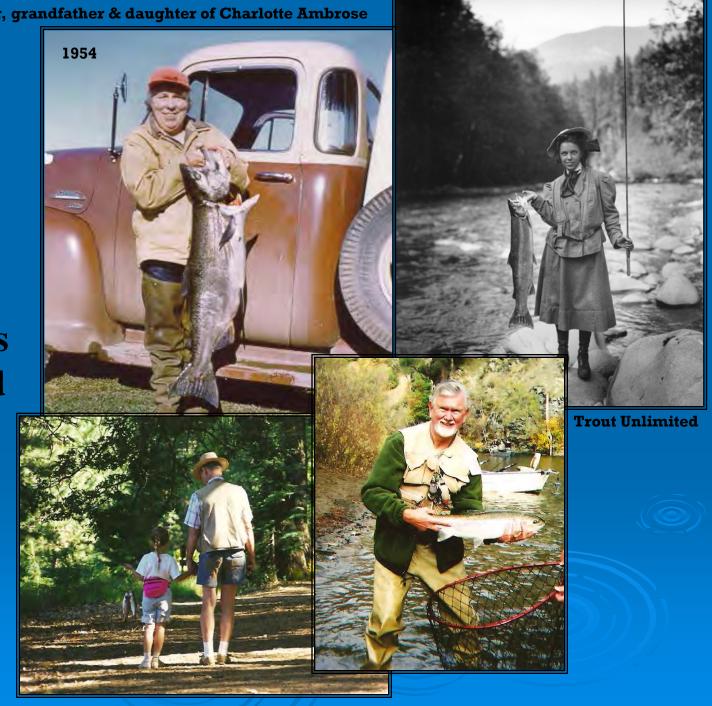
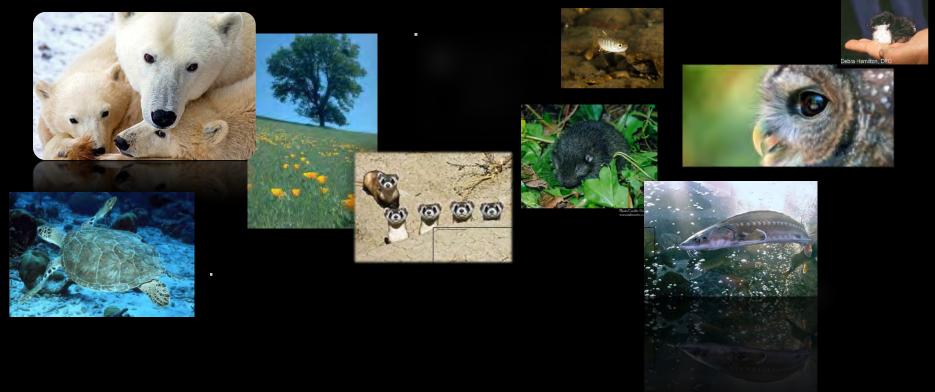
Great grandmother, father, grandfather & daughter of Charlotte Ambrose

Within the living memories of California's elders are vivid accounts of salmon and steelhead in staggering abundance...





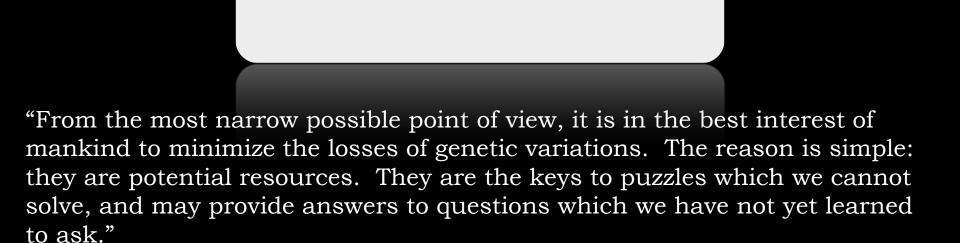
40 Years of the Federal Endangered Species Act



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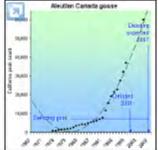
The Federal Endangered Species Act (ESA)

- -Enacted by Congress and signed into law December 28, 1973 by President Nixon
- -Established to "safeguard the Nation's natural heritage by conserving species in danger of extinction for the enjoyment and benefit of current and future generations."

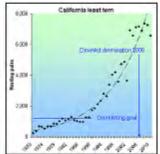


U.S. House of Representatives, 1973, when enacting the Endangered Species Act

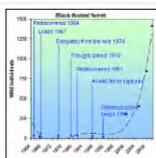




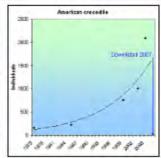






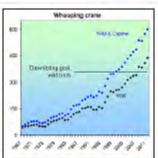




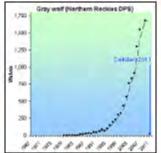


40 Years of the ESA

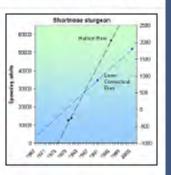


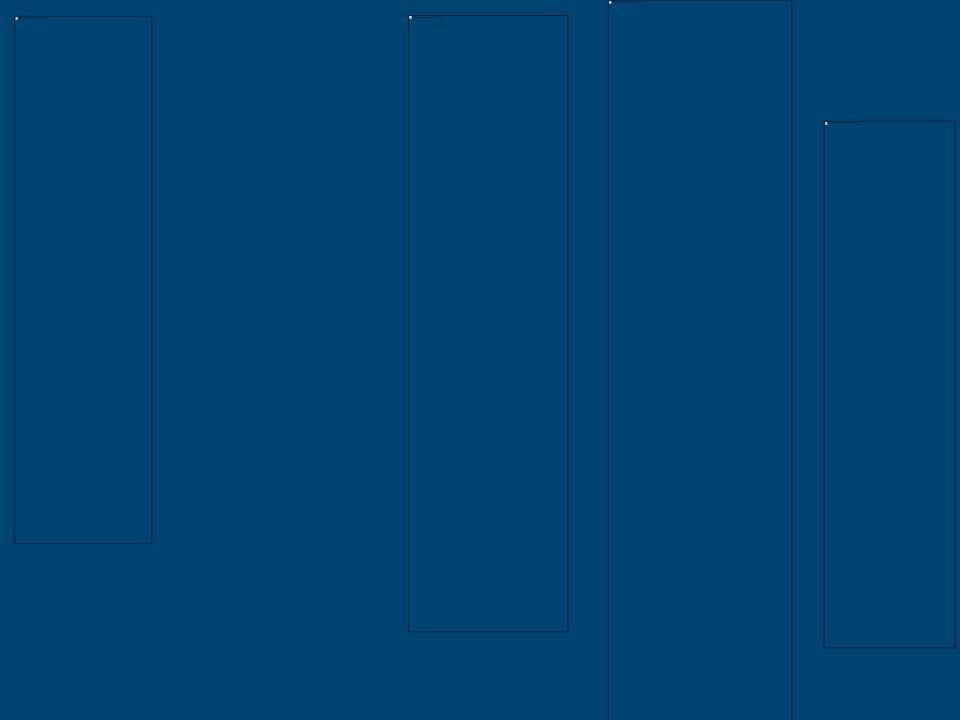












32nd Annual Salmonid Restoration Conference

Santa Barbara, California

Charlotte Ambrose NOAA Fisheries Recovery Coordinator

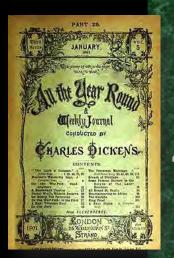
North Central Coast Coho Salmon, Steelhead & Chinook Salmon

Narrated Documentary

Paying Tribute to 40 Years of the ESA History of Salmon as told by Charles Dickens

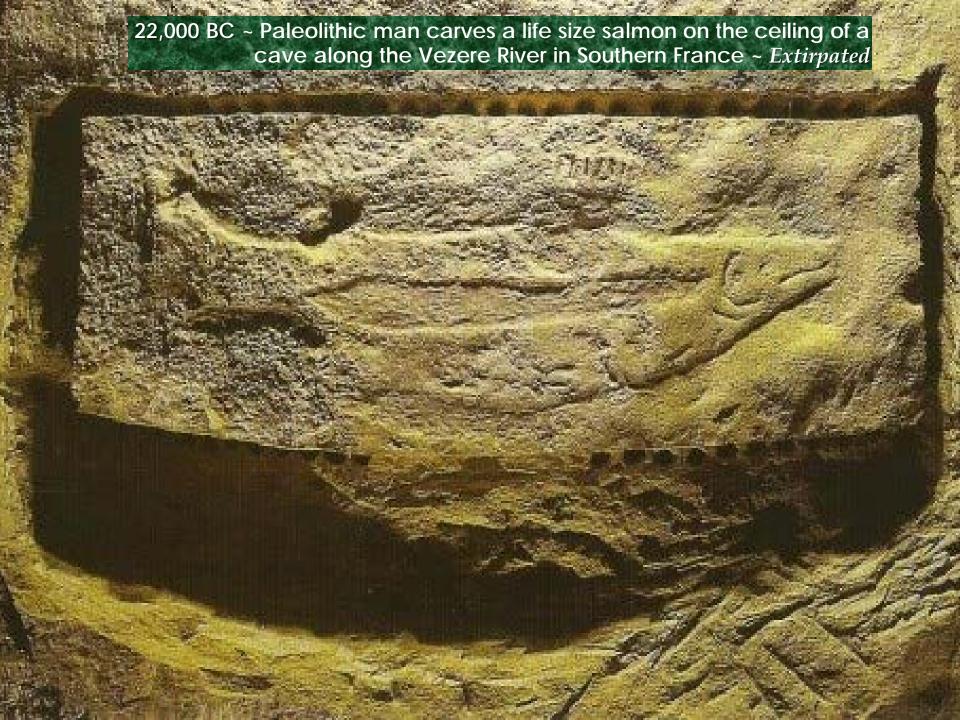
5 Strategies from the Social Sciences for Coastal Salmon and Steelhead Recovery I have no way of judging of the Future but by the Past.
-Patrick Flenry

"It will doubtless be news to many that, among the silent effects which our present age is producing upon the animal creation – one of those mighty results which silently and slowly grow from day to day, from year to year, till at last they burst upon our view a stupendous fact, a thundering avalanche composed of thousands of minute flakes of snow – is the gradual extinction of the salmon. The cry of "Salmon in Danger!" is now resounding throughout the length and breadth of the land. A few years, a little more over-population, a few more tons of factory poisons, a few fresh poaching devices...and the salmon will be gone...he will be extinct....



All The Year Round October 1861 by Charles Dickens

"That our ancestors were possessed of more intimate knowledge of the ways of the salmon..."



200 BC ~ Celtic France

SALMON: KEEPERS OF WISDOM

Believed the most intelligent of animals for they braved predators, survived in ocean and river waters, and leaped effortlessly through the air in their journey back to their place of birth; when a person touched a salmon they would gain this sacred knowledge.



45 BC ~ Soldiers of Caesar

Around 45 BC, "the soldiers of Caesar, when on their victorious march toward Gaul and Britain, they reached the banks of the Garonne, to behold the fish [salmon] cleaving his joyous way upwards as he made his ascent from the sea. Romans prized salmon in their Gallic and British provinces."

300 AD

Pliny The Elder the First was the first to write about salmon in "Natural History"
"...salmon are the most esteemed of fishes..."

De piscatura Salmonum

371 AD

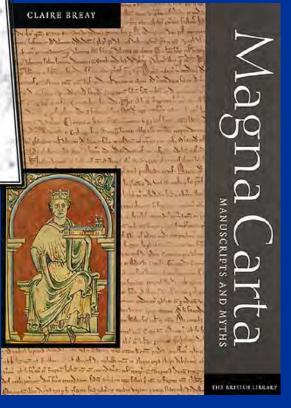
"...Nor will I pass the glistening salmon by with crimson flesh within of sparkling dye...with what colours has Nature painted thee."

Ausonius, Southern France

Extirpated

1215 AD

The Magna Carta provided for the dismantling of the Kings weirs which protected salmon for the people of England.



1285 AD

Edward the First signed into law severe penalties for salmon poaching...the third offenders faced a year in the dungeons.

LION HEART (RICHARD THE FIRST)

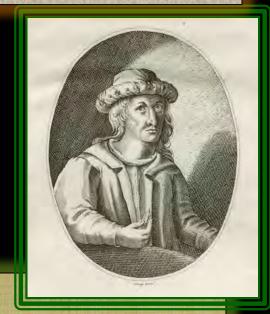
Embodied into the English code that for salmon passage there be "left in all weirs a gap of such size that a 3-year old pig might turn round in it without touching snout nor tail."





1400 AD

England's King Robert III decreed that 3 offenses of killing salmon out of season was a capitol offense



1406 AD

Robert III, King of Scotland, set a closed season for Scottish rivers; an act that remained in place for over 400 years.

HENRY THE IV, V & VI

Dictated statutes curbing the practice of blocking salmon rivers to salmon migration.









1500's Parliamentary Bills

Against destroying eels and salmon, unlawful fishing nets in the River Thames and for the preservation and increase of salmon and the fry of salmon.



1816 (MORE) PARLIAMENTARY BILLS

To address poaching, remove obstructions and control pollution.

But it came too late.



TREASURES OF THE DEEP DANIEL B. FEARING 1876

There is no end to the destructive appliances which man has brought to bear against this lordly fish. And the public themselves are impatient of legislation. River fisheries are regulated by more than 20 acts and have been the subject of more government inquiries than we care to count.

People, who know little of the economy or life history, have come to regard this inhabitant of the waters with something like annoyance.













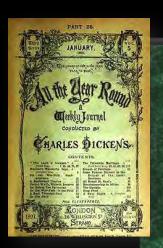


CHARLES DICKENS ALL THE YEAR ROUND 1888

"Owing to causes such as drainage, pollution, and the formation of weirs...salmon forsake certain rivers. To see a salmon river in the fullness of its abundance we must cross the Atlantic and visit the waters of the Columbia, Sacramento and other streams which actually swarm with hundreds of thousands of salmon."

"And are we, active, healthy Englishmen in heart and soul, full of veneration for our ancestors, and thoughtful for the yet unborn ...Shall we not step in between wanton destruction...and so ward off the obloquy which will be attached to our age when the historian of 1961 will be forced to record that:

"The inhabitants of the last century destroyed the salmon...."



All The Year Round October 1861 by Charles Dickens

"That our ancestors were possessed of more intimate knowledge of the ways of the salmon···"

Rachel Carson

- Aquatic and marine biologist in the US Bureau of Fisheries
- Became a full time nature writer in 1950
- 1951 "The Sea Around Us" won her a US National Book Award followed by "The Edge of the Sea" and "Under the Sea Wind"
- 1962 "Silent Spring"...raised concerns about pesticides

Rachel Carson

- Despite fierce opposition by chemical companies, Silent Spring spurred a reversal in national pesticide policy and inspired a grassroots environmental movement that led to the US EPA, the Clean Air Act, the Clean Water Act and the Endangered Species Act.

"Silent Spring" launched the contemporary American environmental movement



What are Endangered Species?

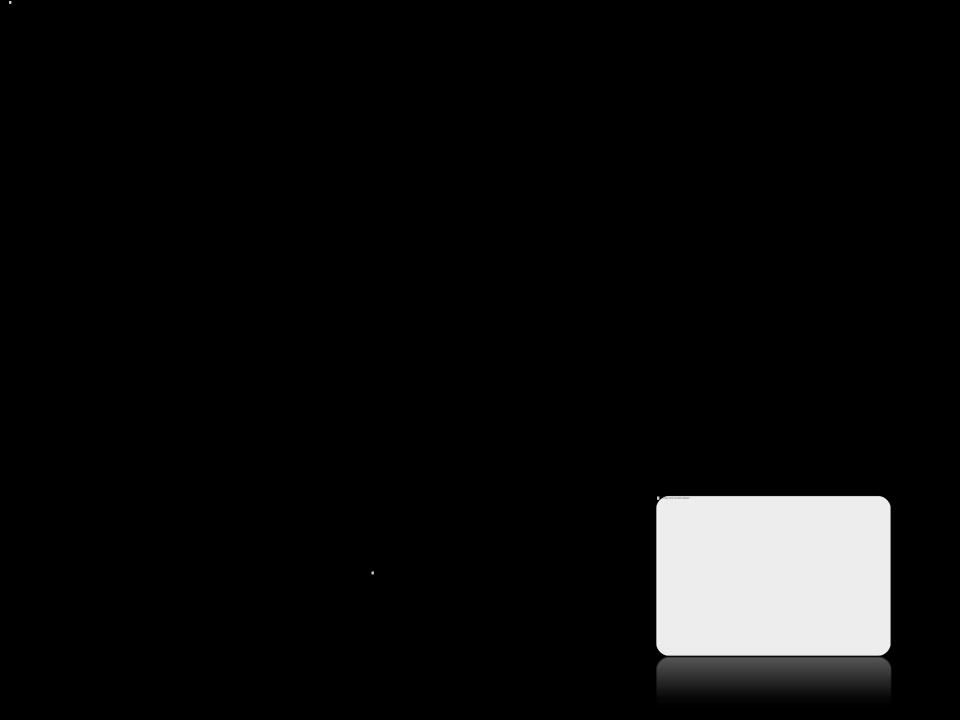
They are the warmth, joy, and glory of being alive amid the vast diversity of living things — big and small, delicate and mighty.

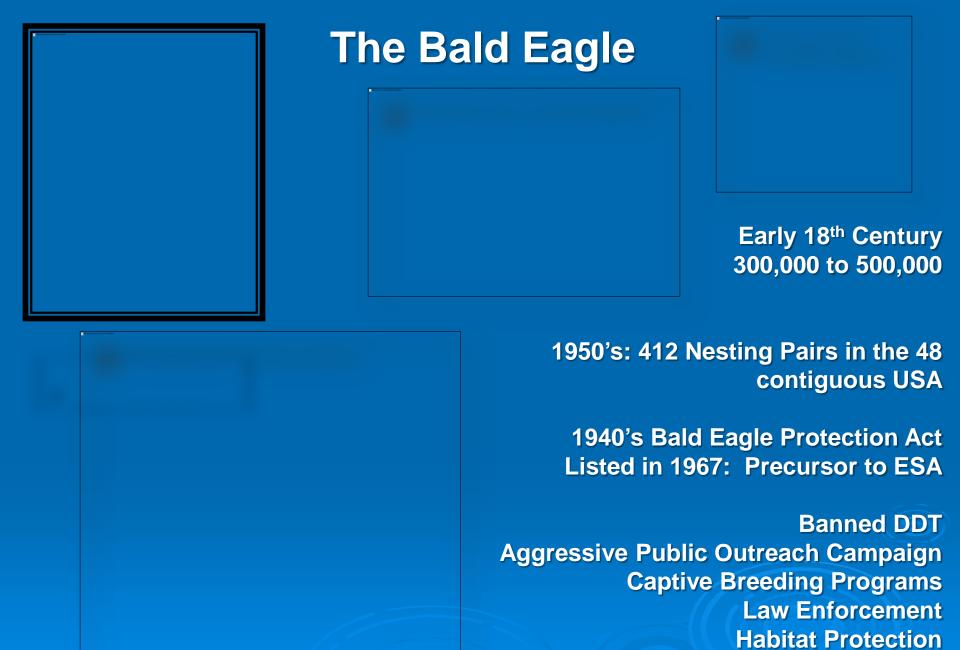
They are the memories of childhood, the stuff that carefree sunny afternoons were made of. They are the beetles and snails, the butterflies and dragonflies, endlessly pursued and carefully captured to be admired in mason jars with freshly picked grass and newly aerated lids.

What are Endangered Species?

They are the rhythm of the seasons. The migrating birds whose sweet songs announce each spring, the wildflowers that scent and color the summer meadow, the earth-toned leaves that fall on crisp autumn mornings, and the tracks of predator and prey acting out age-old dramas across the winter snow.

They are the hunter and the hunted, whose behavior has made the bison tough, antelope swift and mountain goats nimble.





Delisted: 2007

The California Condor

- 1986: 22 Condors in the wild
- Captive breeding contemplated
- Opponents to captive breeding said "it would change species habits and the cost was too great".
- In 2014 we have a total Condor population of 410 with 232 in the wild with breeding observed for the first time in 100 years

The Oregon Chub

Listed as Endangered in 1993
First fish to be proposed for delisting (February 2014)

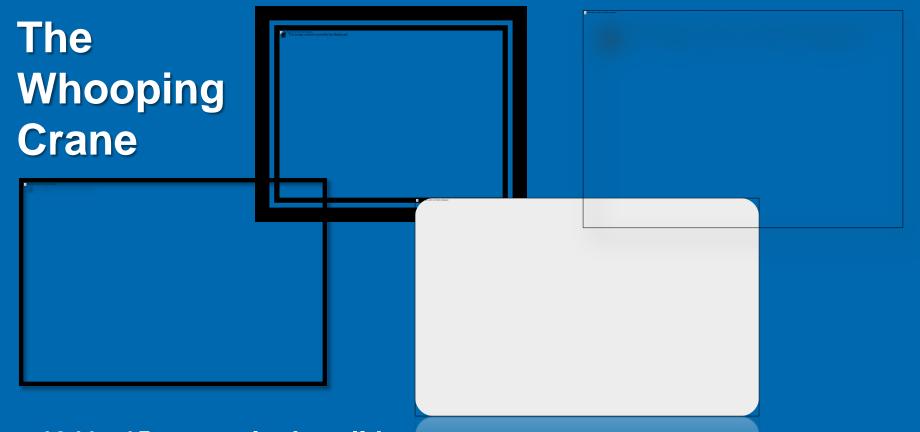


Oregon Governor John Kitzhaber:

"A remarkable story and example of the power of collaboration between landowners, non-profit organizations, and state and federal agency employees that got behind the effort decades ago to ensure the species would not become extinct."

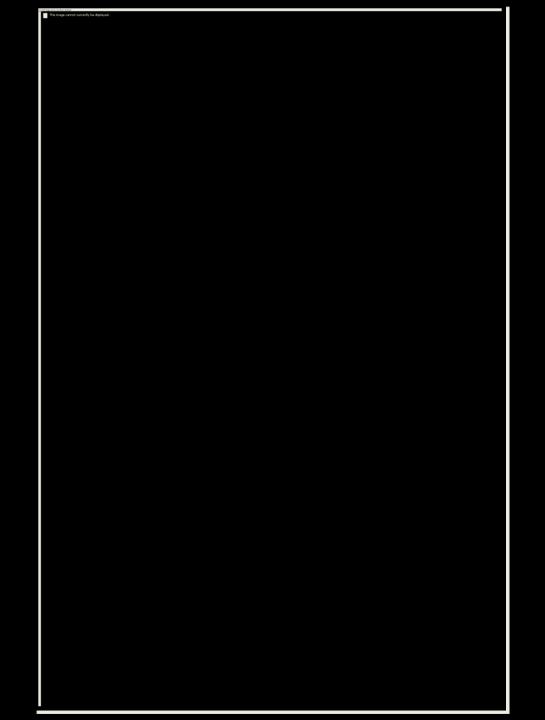
Paul Hanson USFWS:

"Excellent example of how the ESA is intended to function, working together with partners to recover endangered species."



- 1941: 15 cranes in the wild
- Outlandish idea to raise chicks in captivity using crane costumes and fly them on their historical migration route with an ultralight.
- 1,200 mile route across 7 states (WI; IL; KY; TN; AL; GA; FL)
- ~30 stopover sites
- 2011 marked a decade of Operation Migration
- Today: 300 Wild + 150 Captive = 450 cranes in North America

What are Endangered Species?



Caribbean Monk Seal

Santa Barbara Song Sparrow

Blue Pike

The Great Auk

Tecopa Pupfish

California Grizzly Bear



Carolina Parakeet

Bachman's Warbler

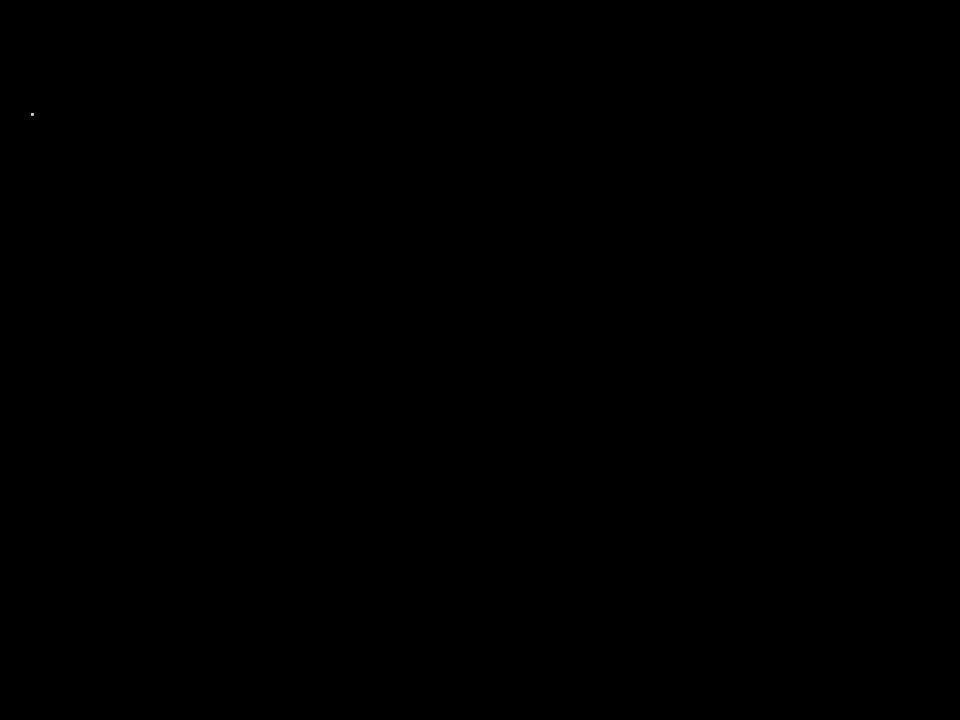
The air was literally filled with Pigeons; the dung fell in spots, not unlike melting flakes of snow; and the continued buzz of wings had a tendency to lull my senses to repose.

The Passenger Pigeon, by John James Audubon

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On Sept. 1, 1914 at 1:00 pm, Martha, the last known passenger pigeon died at the Cincinnati Zoo.

Her passing marked the end of a species that once was so ubiquitous that enormous flocks (one estimated at more than 3 billion birds) were said to have blocked out the sun.





The Social Sciences of Saving Salmonids

Five Strategies for Coastal Salmon and Steelhead



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Salmon extinction is nothing new....

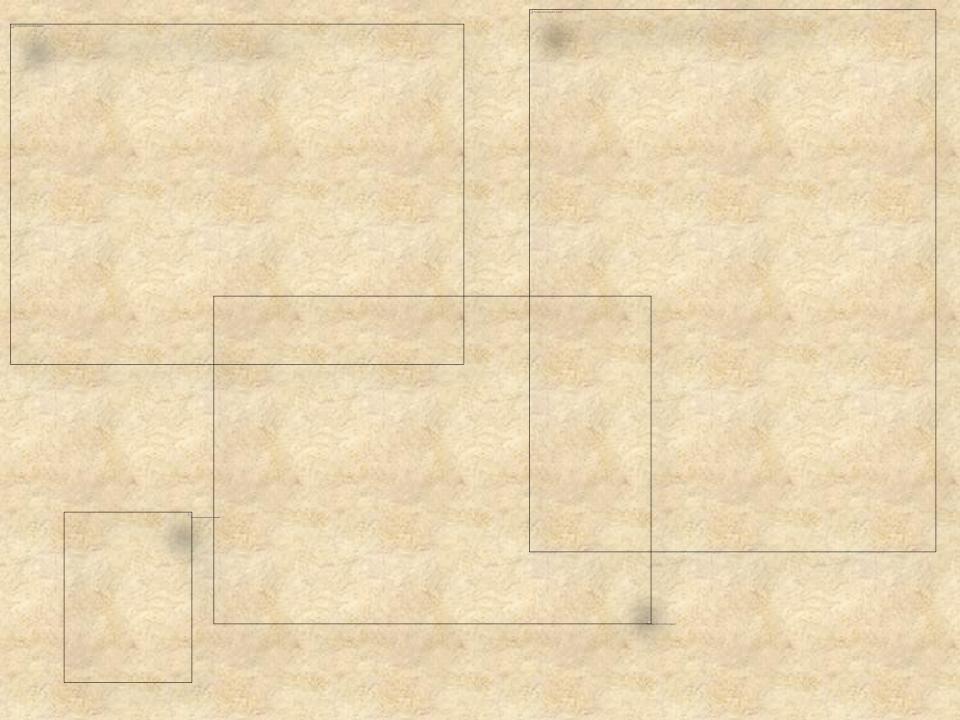
"Our modern salmon crisis is a strikingly faithful retelling of the fall of Atlantic salmon in Europe..."

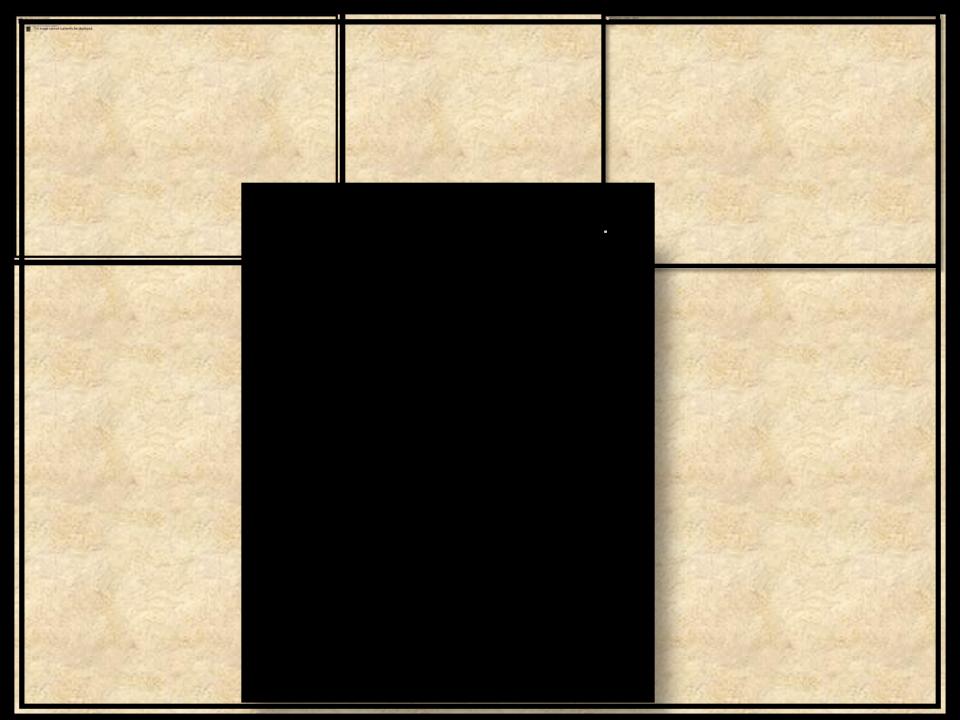
Montgomery 2003



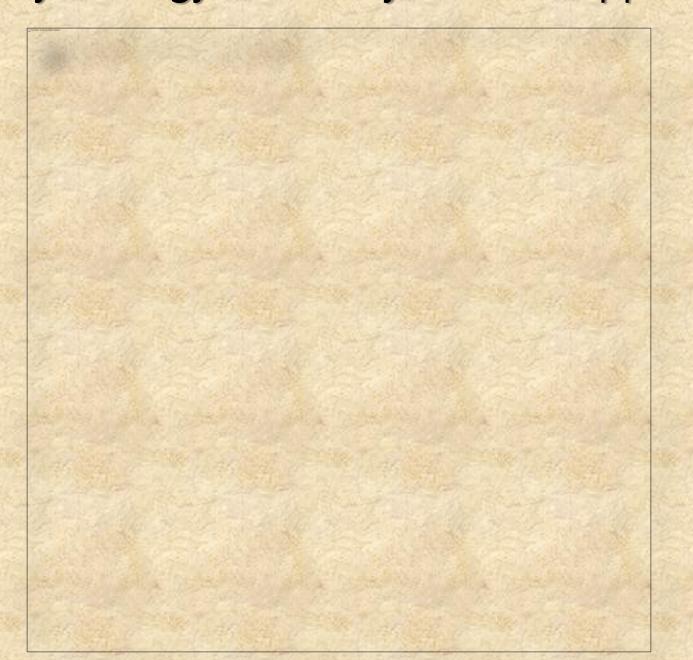
Nearly 90 percent of the known healthy populations of wild Atlantic salmon are found only in – Norway, Canada, Iceland, Scotland and Ireland.

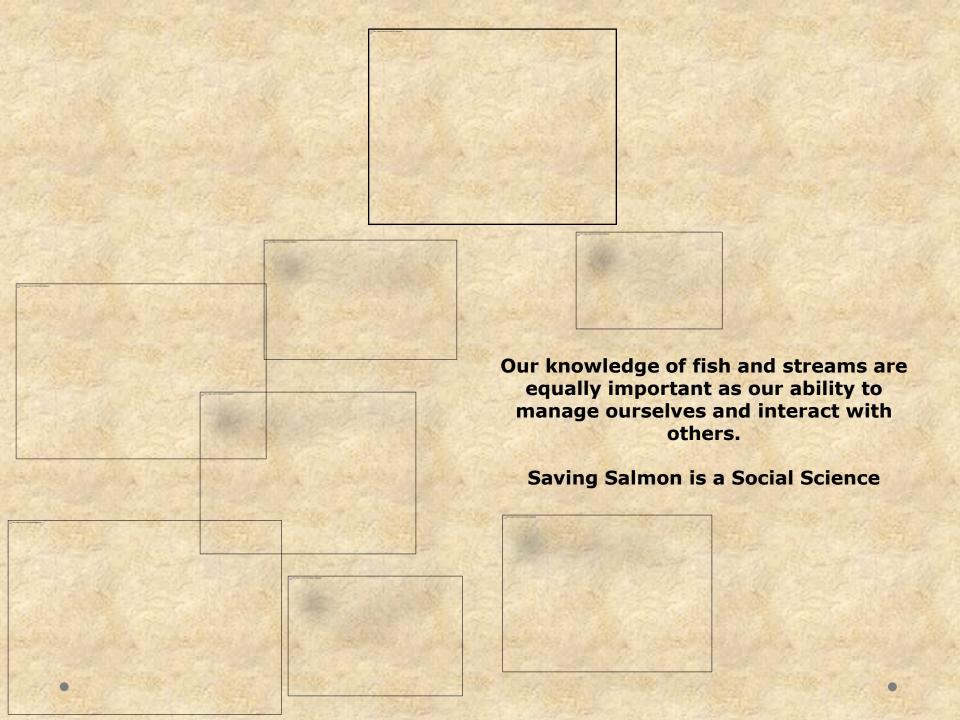
(World Wildlife Fund, Status of Atlantic Salmon, 2011)



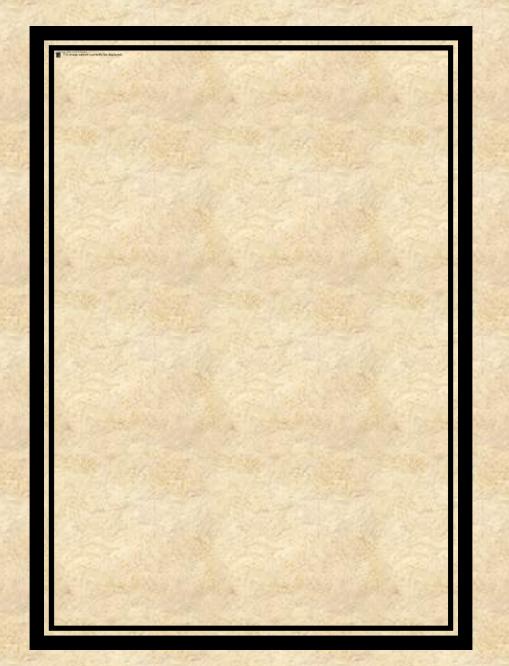


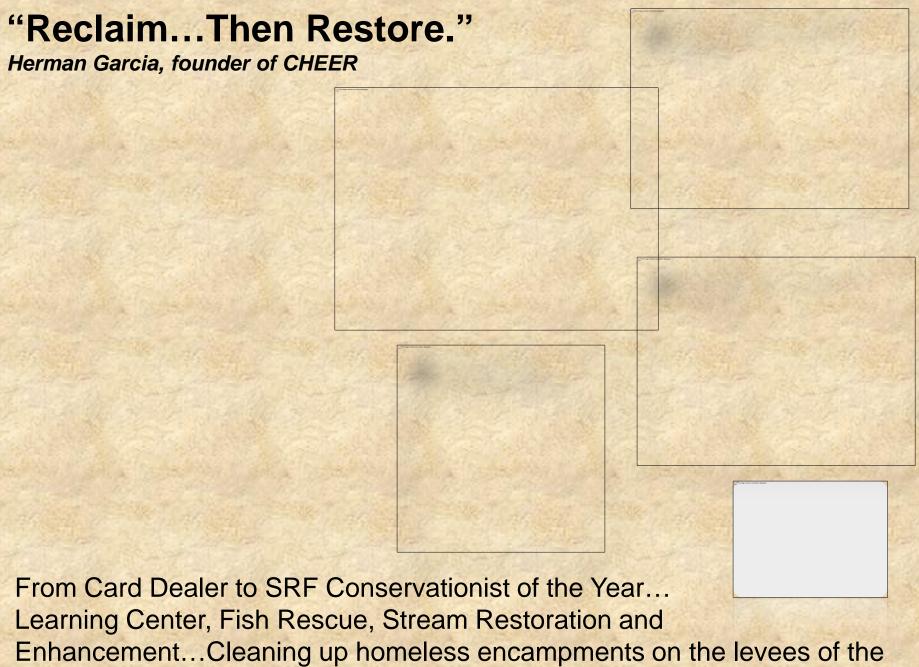
Recovery Strategy #2: Everyone's An Opportunity





Never Underestimate A Potential Recovery Partner

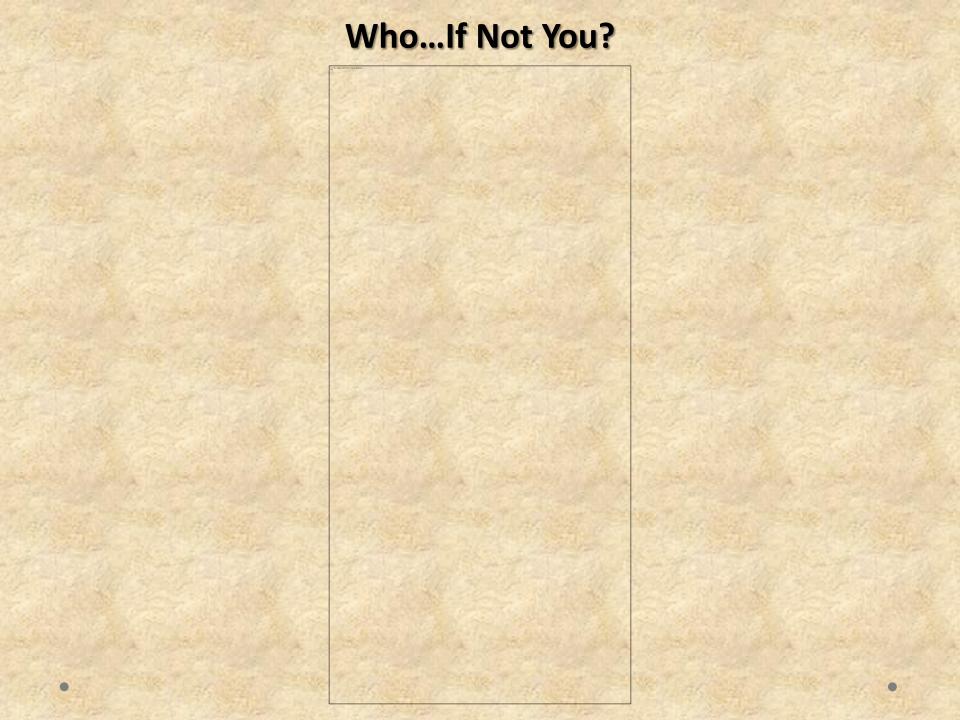




Enhancement...Cleaning up homeless encampments on the levees of the Pajaro River, CA, to protect steelhead along California's central coast.

Recovery Strategy #3: Be An Agent of Change







Don't worry too much about perfect...the story just needs to be told
Saving Salmon is a Social Science

Recovery Strategy #4: Act Deliberately



State & Federal Recovery Plans



Recovery Plans

Role of Populations in Recovery
Genetic Diversity - Life History - Viability - Population Structure
Number of Spawners Needed in a Watershed
Historical Extent of Spawning & Rearing
Potential of Stream Reaches To Express Conditions Favorable To Salmonids

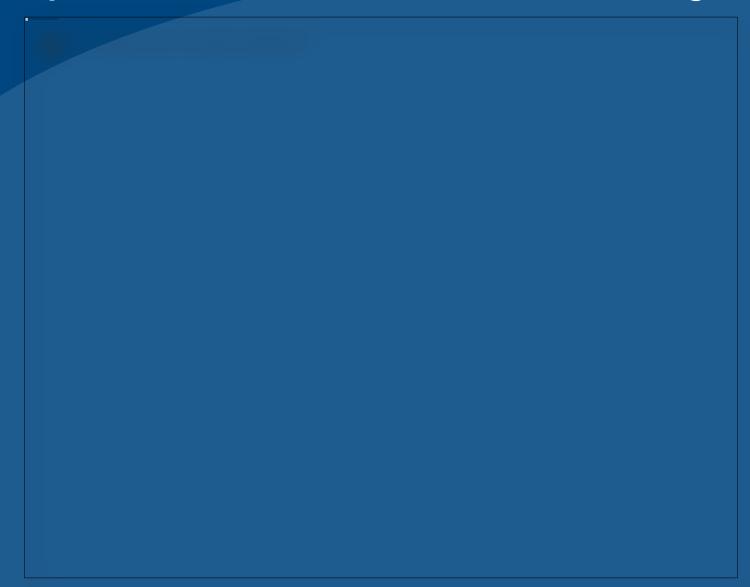


Recovery Plans

Habitat and Population Data and Information Being Collected
Compiled and Analyzed
Formed Hypotheses on Conditions Impairing Survival & Recovery
Threats to Salmonids
Recovery Actions - Costs - Criteria



http://www.westcoast.fisheries.noaa.gov/



Recovery Plans

Required by the ESA when a species is listed

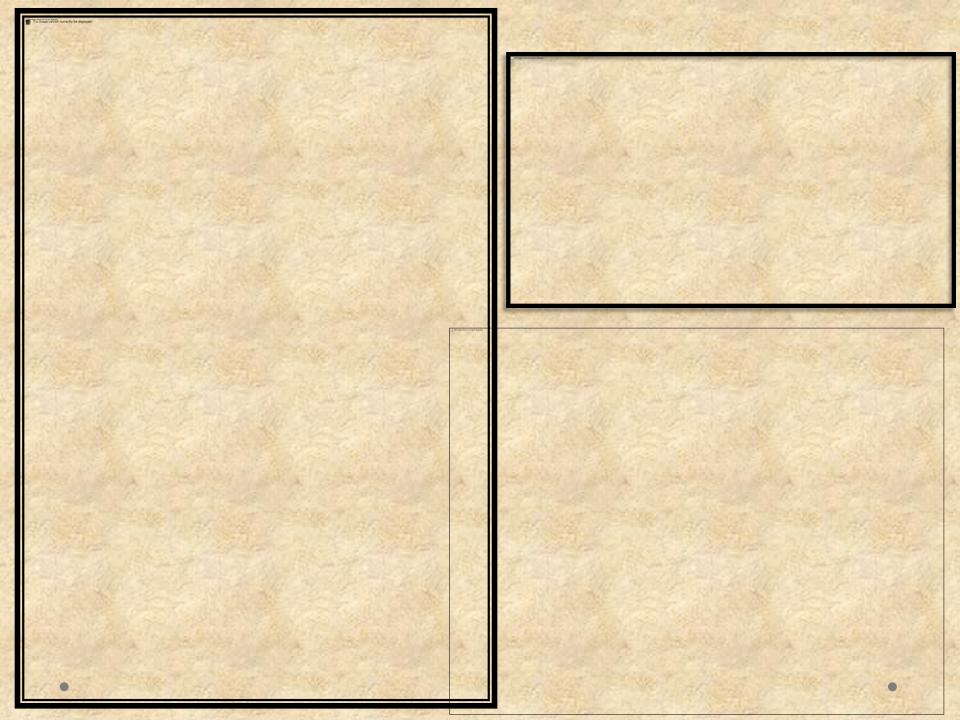
Each Plan Provides a Road Map

NOAA Needs You at Our Side as Ambassadors

Time of Transition From "More Evaluation" to "More Action & Monitoring"

Help Us Improve On These Plans and Make Them Relevant & Useable (Reframe & Retool)

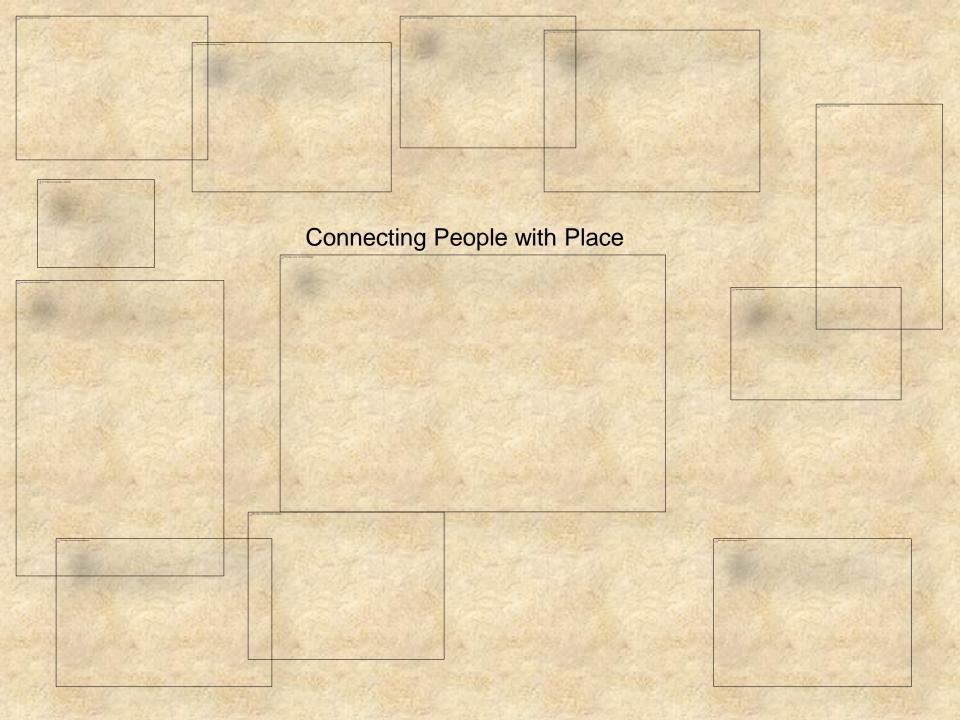


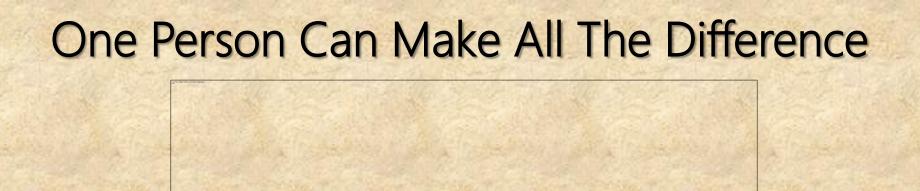




Recovery Strategy #5: Be Present...and prepared







Taking The Path To Bring A Species Back Don't Take "No" For An Answer Be Water – Never Give Up

The Social Science

Five Strategies for Coastal Salmon and Steelhead

- 1. Reflect on the Past
- 2. Everyone's Potential Partner
- 3. Do What You Are Afraid To Do
- 4. Act Deliberately
- 5. Be Present & Prepared



"Mr. Livingston Stone describes the first assault of the salmon on a dam erected on a branch of the Sacramento River... "the sight was one never to be forgotten. For several rods below the bridge the salmon formed one black writhing mass of life. Piled together in solid columns they charged against the bridge and dam, which trembled and shook beneath their blows. Finding the fence impassible, despite their superpiscine efforts many tried to jump the bridge, which some succeeded in doing, sometimes striking the men on the bridge and jumping between their feet. For an hour and a half the fierce assault continued, when at length exhausted and discouraged by repeated failure, the wearied fish pilgrims fell back into a deep hole just below the rapids". Such is the state of things in the rivers of the Pacific slope today and such may it have been also in our own country."



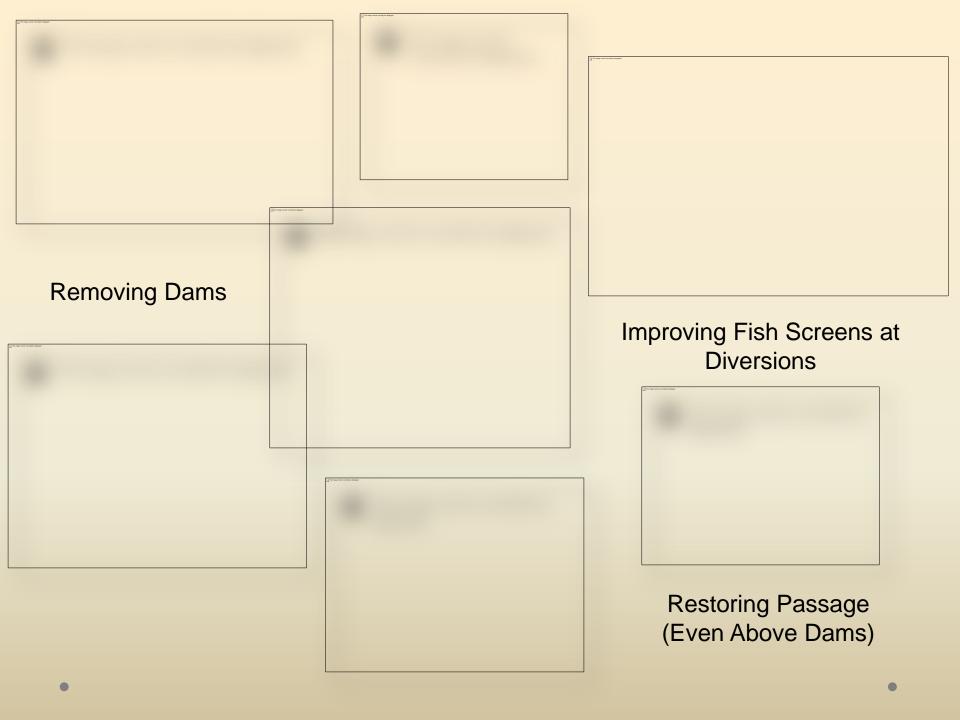
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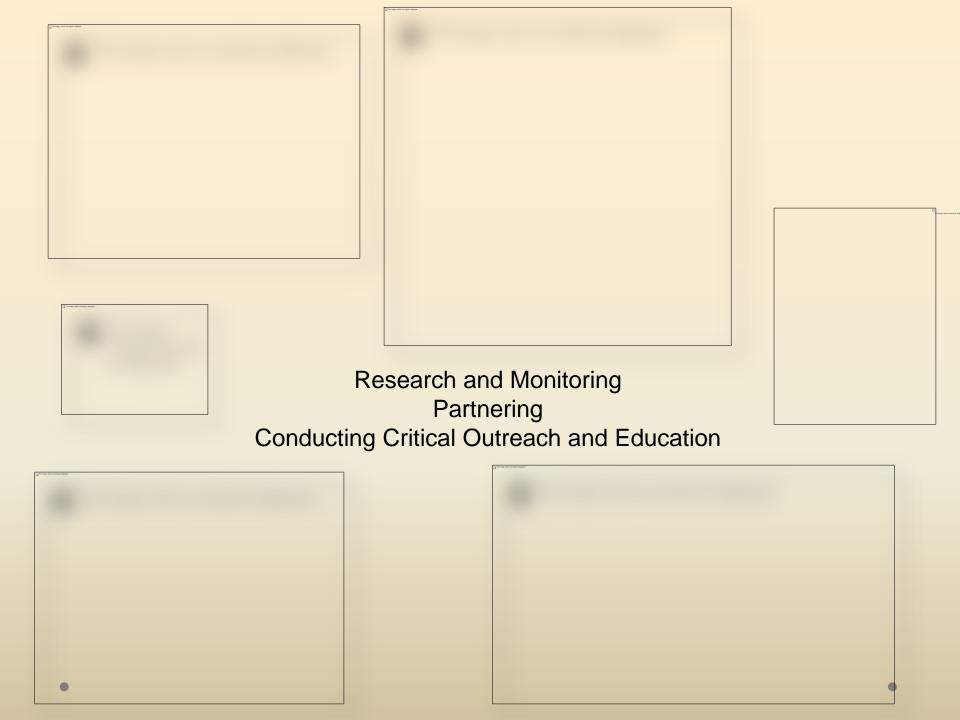
Montgomery 2003

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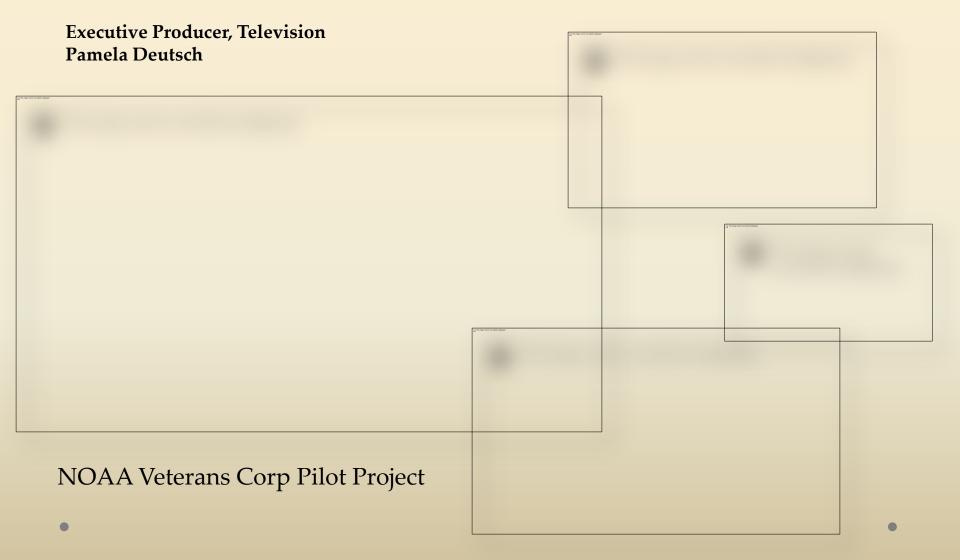


	Restoring Marsh, Wetlands, Floodplains and Estuaries		
anna araja kapat	Bringing Wood Back to Streams		
	Confronting Water Challenges		
	Transitioning to Conservation Hatchery Programs		
	Re-thinking Impacts of the Homeless		
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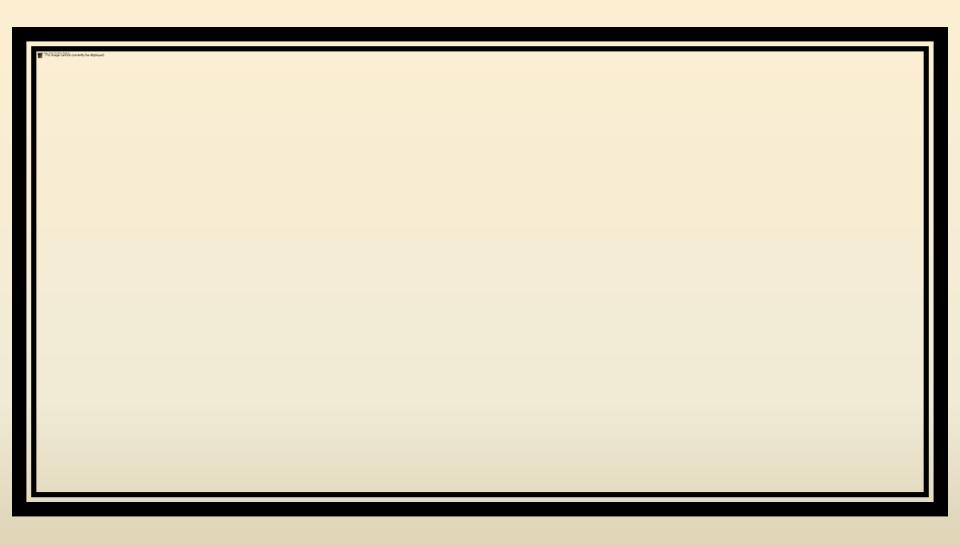


"The Endangered Species Act may be an act to save wildlife, but it is also a celebration of the good of humanity. It is about our expression of hope, about our desire to make the world a more beautiful place. It is a law that expresses the best of our inner nature. And for that, I'm thankful.



"Now, on the 40th anniversary of the Act, every American should stop and celebrate the fact that the law known for preserving bald eagles, grizzlies, and wolves has saved a remarkable 99 percent of the more than 1,400 species entrusted to its care. 90 percent of protected species are recovering."

Executive Director, Center for Biological Diversity Kieran Suckling



A book by The Endangered Species Coalition



Army Core of Engineers Arpita Bhattacharyya Associated Press **Austin Creek Materials** Bill Stevens **Bob Pagliuco Brian Cluer** Brian Ellrott Brown & Gold **Bruce Wright** California Conservation Corps. California Department of Fish and Wildlife Campbell Timberlands Center for Biological Diversity Charleen Gavette **Charles Dickens CHEER** Christine Hill Cincinnati Zoo Condor Recovery Program **Cornell University Dave Downey David Montgomery** David Mrazek

Andrew Glass

Endangered Species Coalition François Levaillant Garden Greenhammer George Brown Goode J.G.Keulemans Jacki Pearson-Meyer Jeff Schweitzer Jerry A. Payne Jim Milbury Joel Greenberg John James Audubon Josh Fuller Larry Phillippe Marilyn Stubb MDF Morgan Bond National Geographic **Operation Migration** Robb Kendrick Salmonid Restoration Federation Sonoma County Water Agency South West Fisheries Science Center Stanford University Steve Edmondson Steve White **Temple University** The Nature Conservancy The Smithsonian U.S. Fish and Wildlife Service **United Press International**