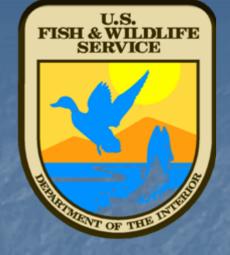


Contact Info.

- Warren Lorentz
- US Fish & Wildlife Service Daphne, AL
- Natural Resource Damage Assessment and Restoration (NRDAR) Case Manager for the Anniston PCB Site
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Presentation Outline

- USFWS (mission, responsibility, and role)
- Natural Resource Damage Assessment and Restoration (NRDAR) Process
- CERCLA vs. NRDAR
- NRDAR activities at the Site
- USFWS Perspective (an example)
- Summary
- Questions?



U.S. Fish & Wildlife Service

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people.

We are...

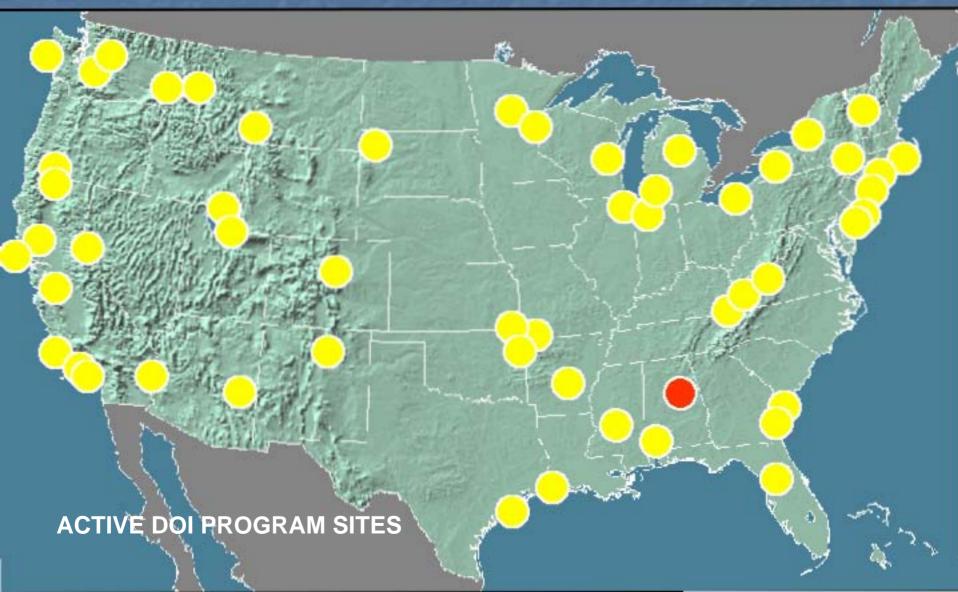
A Conservation Legacy

The U.S. Fish and Wildlife Service is the only agency of the U.S. Government whose primary responsibility is fish, wildlife, and plant conservation.

The Service's major responsibilities are for migratory birds, threatened and endangered species, certain marine mammals, and freshwater fish, and the habitat supporting those resources.

NRDAR Activities - 2002





Role of USFWS at Anniston PCB

- Basically 2 Roles
- First: Provide technical <u>assistance</u> to EPA to ensure that the cleanups protect migratory birds, fish, T&E species and their supporting habitat.
- Second: Conduct a Natural Resource Damage Assessment and Restoration (NRDAR) with fellow natural resource trustees.

The Natural Resource Trustees for the Anniston PCB Site







Alabama Department of Conservation and Natural Resources

For this Site: 2 State Agencies and

1 Federal (USFWS is the Lead Administrative Trustee)

CERCLA vs NRDAR - Basics

- EPA led (Pam Scully)
- Goals are the Overall Protection of Human Health and the Env.
- Reduction of toxicity,
 mobility or volume
 through treatment

- Natural Resource Trustee Led (Myself)
- Goals are to Make the Public WHOLE for injury of their resources with restoration as the endpoint.

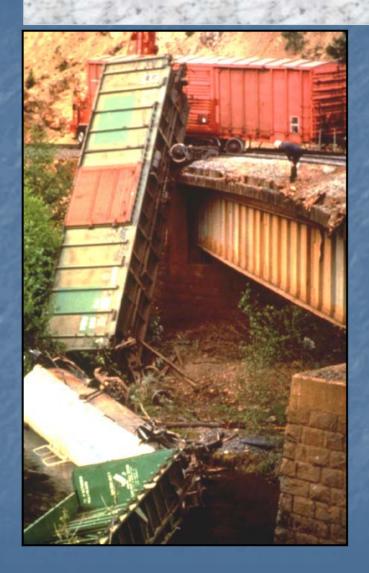
Misconceptions

The Trustees (ADCNR, GSA, and USFWS) are **NOT** part of the Partial Consent Decree with EPA and Solutia/Pharmacia!!

Although somewhat similar in nature, and appear to overlap at times, they are entirely 2 different processes!

What is Natural Resource Damage Assessment?





Process used by natural resource trustees to determine the nature and extent of injury to trust resources caused by an oil spill or release of a hazardous substance.

Examples of Potential Natural Resources & Services at this Site

- Surface water
- Ground water
- Soils
- Sediment
- Benthos
- Mollusks
- Fish*
- Reptiles and Amphibians
- Birds
- Mammals

- T&E Plants
- T&E Mollusks
- T&E RCW
- T&E Gray Bat
- T&E Blue Shiner
- T&E Bald Eagle
- Water: Consumptive Use
- Water: Non-Consumptive Us
- Recreational Fishing
- Others?

The NRDAR Process

- Basically the recovery of damages (usually \$) for injury to, destruction of, or loss of natural resources, including the reasonable costs for assessing such injury, destruction or loss resulting from a release of a hazardous substance. The money is intended to be used to restore, replace or acquire the equivalent of the injured resource.
- BASIC GOAL: Reimburse the public for the injuries as a result of the incident if the incident had never occurred through restoration.

Major Concepts in NRDAR

- Damages (usually \$) are for compensation to injuries to natural resources or/and response actions
- Damages (\$) <u>are</u> to be used for Restoration
- This is <u>NOT</u> a punitive process!!
- The Public and the PRPs are involved in the process

General Steps in the NRDAR Process



Pre-assessment Screen

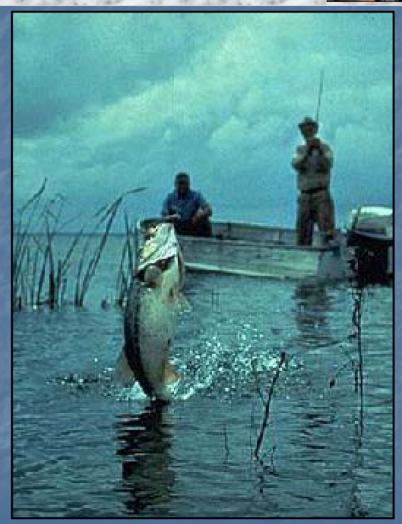
Assessment Planning:

- Injury Determination
- Injury Quantification

Damage Calculation

Settlement or Litigation

Restoration



Where are we?

- Pre-assessment Screen May 2005
- On June 16, 2005 Solutia/Pharmacia were sent an invitation letter from USFWS on behalf of the Natural Resource Trustees to participate in a cooperative NRDA.
- On July 25, 2005 Solutia/Pharmacia responded with a willingness to meet with the Trustees to discuss NRDA issues/concerns.
- Trustee and PRP meeting in late September 2005

General Steps in the NRDAR Process



Pre-assessment Screen

Assessment Planning:

- Injury Determination
- Injury Quantification

Damage Calculation

Settlement or Litigation

Restoration



How Long Does this Take?

Partially depends on Solutia/Pharmacia willingness to participate in a cooperative NRDAR:

2 Avenues

- Litigation (US Gov. Funded)
- Cooperative Settlement (US and Solutia/Pharmacia Funded)

Regardless, USFWS is Committed!!



- In August 2004, USFWS hired a NRDAR Case Manager for the Anniston PCB Site
- USFWS continues to receive support from the Regional Office, Washington Office, and the National NRDAR Program Workgroup
- USFWS receives funding through a competitive proposal process (2nd year)
- Cases are funded based on level of preparedness and probability of success
- The Trustees are working with NGO's, academia, local, state, and other federal agencies and the PRPs throughout the NRDAR process
- In Mid 2006, the Trustees anticipate the release of an Assessment Plan (NRDAR Game Plan) for public comment

NRDAR Assessment Plan (overview)

- Describes the Site and the resources
- Describes the approach and methods
- Uses existing data to develop preliminary conclusions regarding injury to resources
- Contains some preliminary restoration alternatives
- Provides for a planned and systematic course of action
- 30 Day Public Comment Period

NRDAR Takes Time!!





1986 - Oil Spill in California

1994 - Settlement reached

1995 – 10 year restoration plan initiated

1996 12 nest active sites

1998 23 nest active sites

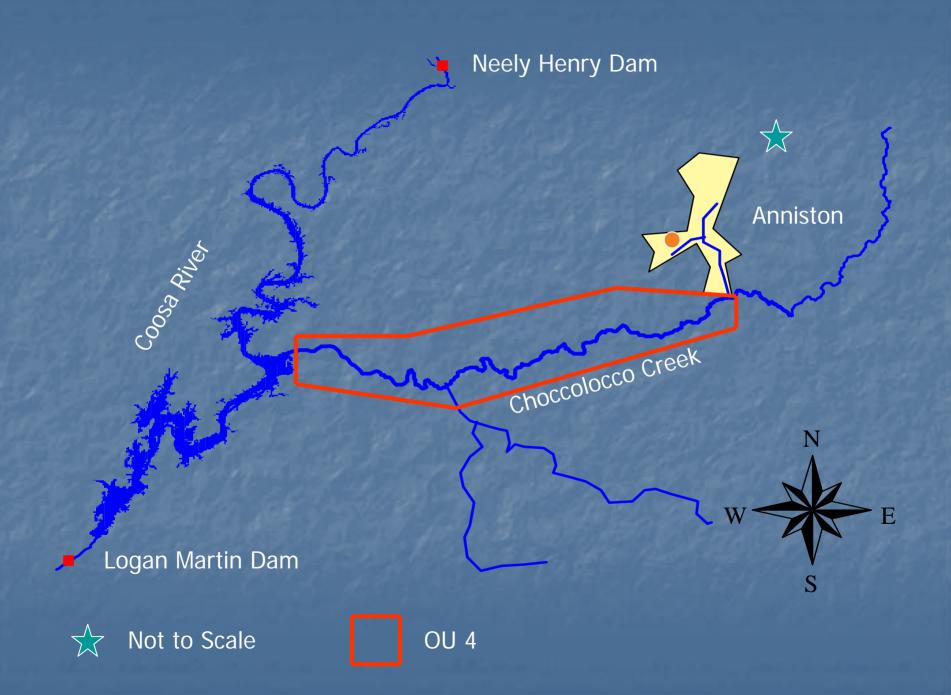
2000 123 nest active sites

2001 156 nest active sites

What does all this mean?

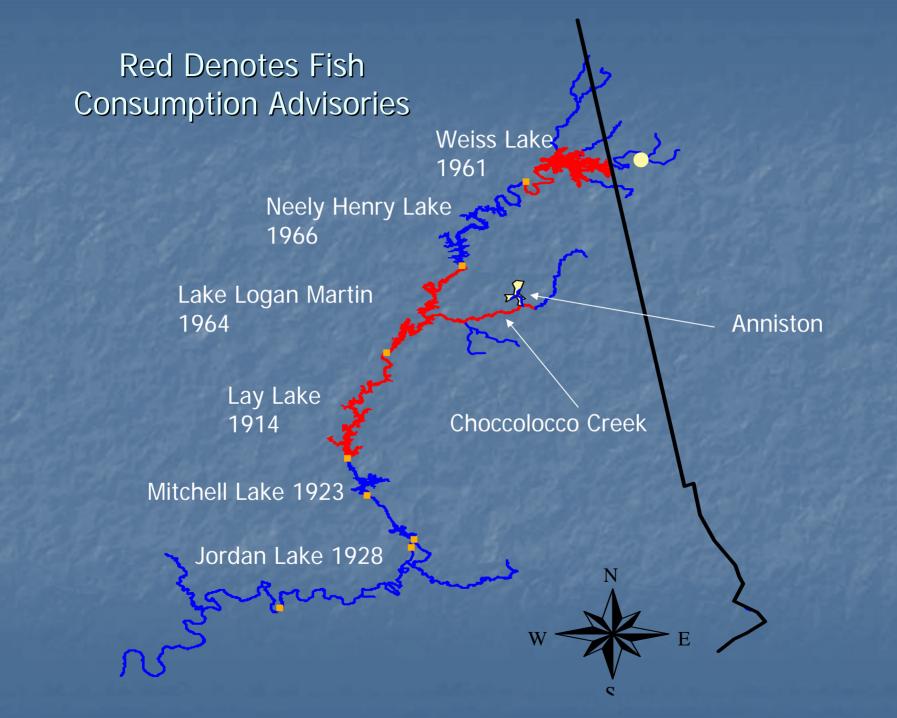
The Anniston PCB Site

USFWS Perspective (An example)



Geographic Area – The Site

- OU 4 Encompasses the length of Choccolocco Creek and its floodplain from the confluence with Snow Creek to Lake Logan Martin
- EPA's Definition: " where contamination has come to be located."
- RI/FS: "A decision on what investigations may be required beyond Choccolocco Creek will be made after data from OU-4 RI, and any other studies that become available, are reviewed.

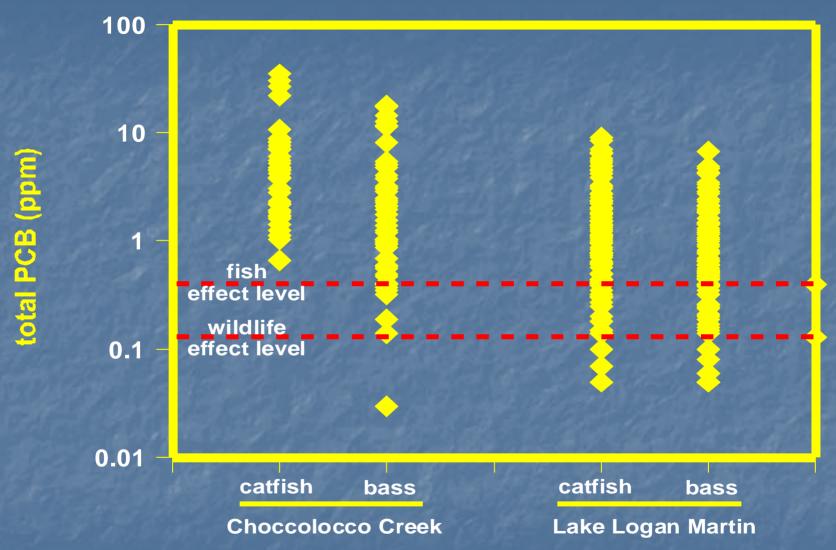


Anniston PCB Site COC levels in fish (BBL 2003)

- Choccolocco Creek:
 - PCB: nd to 49 ppm
 - mercury: nd to 1.4 ppm
- Lake Logan Martin:
 - PCB: nd to 58 ppm
 - mercury: nd to 0.5 ppm

The use of measured concentrations of PCBs in fish is suggested as the most relevant means of measuring exposures of receptors to PCBs in contaminated sediments.

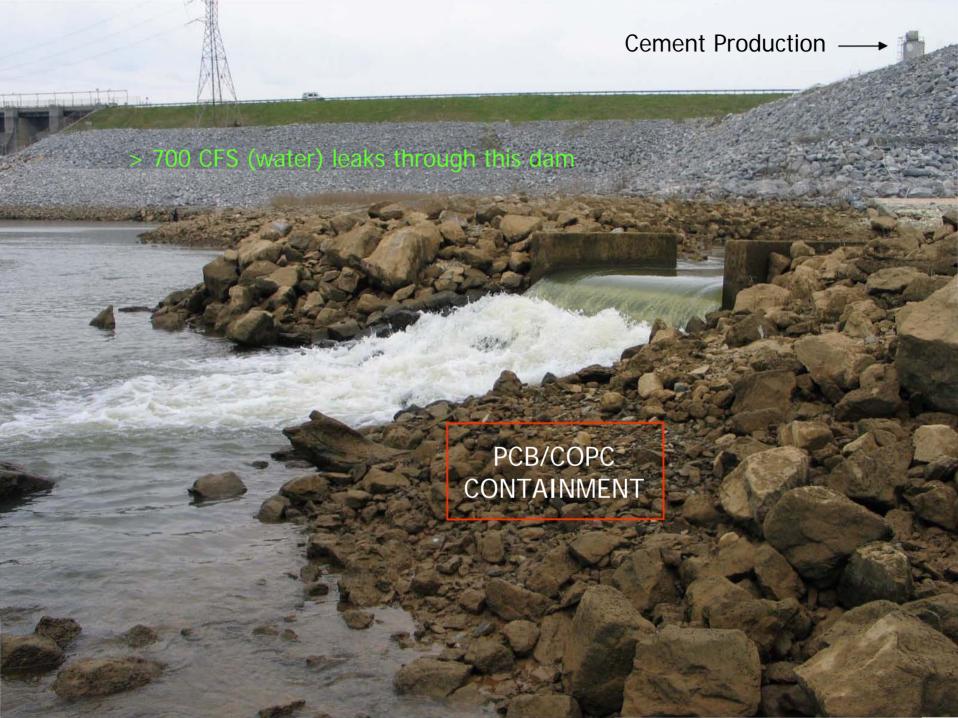




¹ PCB concentration data from BBL (2003)

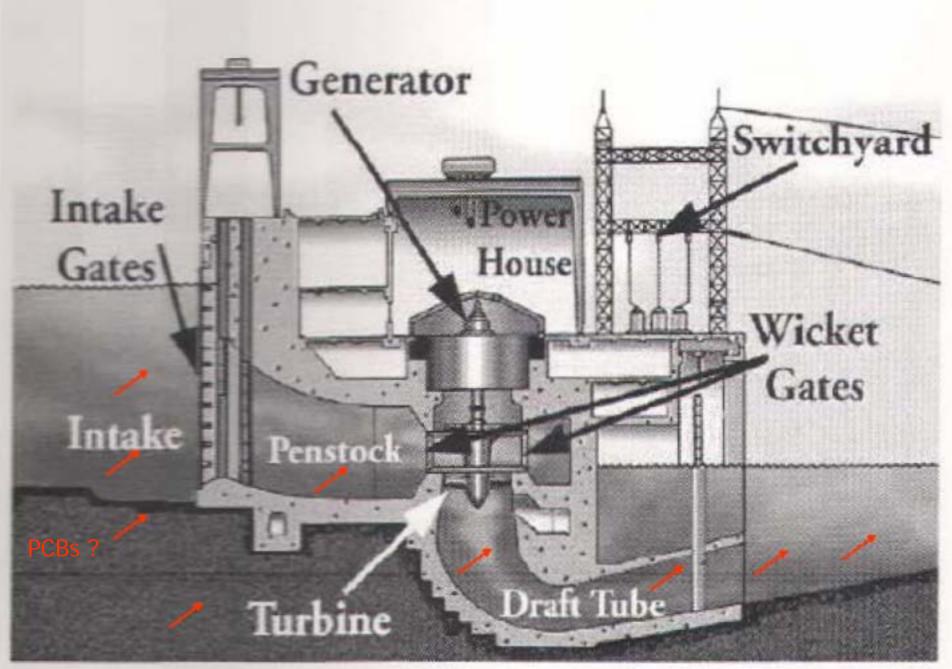
² Piscivorous wildlife dietary effect level (0.13 ppm) from Newell (1987). Fish reproduction effect level (0.4 ppm) from Eisler and Belisle (1996).











Source: Alabama Power Authority, 2000. Typical Hydroelectric Generating Plant

Examples of Potential Natural Resources & Services at this Site

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- Water: Consumptive Use
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- Recreational Fishing
- Others?

In Summary



- The Trustees (ADCNR, GSA, and USFWS) are not part of the Partial Consent Decree with EPA and Solutia/Pharmacia!!
- The Public and Responsible Parties are involved in the NRDAR process.
- The NRDAR process is not punitive.
- Restoration of injured resources is the primary objective of the Natural Resource Damage Assessment and Restoration (NRDAR) process.

Questions/Contact Info.

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