PRESENTATION OVERVIEW

- Introductions
- Overview of Natural Resource Damage Assessment and Restoration (NRDAR)
- Overview of Dan River Coal Ash Spill NRDAR Case
- Proposed Restoration Projects, Public Involvement and Next Steps
- Are authorized by law to act on behalf of the public to restore resources and services injured by a release of hazardous substances.
- Conduct NRDAR process.

### THE TRUSTEES

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<tr>
<th>DAN RIVER NATURAL RESOURCE TRUSTEES</th>
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<tr>
<td>![USFWS Logo]</td>
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<td>![NCDEQ Logo]</td>
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<td>![VDEQ Logo]</td>
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<tr>
<th>DAN RIVER TRUSTEE ADVISORS</th>
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<td>![VADGIF Logo]</td>
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WHAT IS NATURAL RESOURCE DAMAGE ASSESSMENT & RESTORATION (NRDAR)?
Led by Trustees

A legal and scientific process, defined in federal regulations, to determine the amount and type of restoration to offset injuries

Conducted parallel to, and continuing after, the spill response or release

NRDAR’s goal is to **restore** injured resources and services

**Natural Resource Damage Assessment and Restoration is...**

- Determine natural resource and service injuries through time
- Assess damages for injuries (to baseline)
- Recover damages via negotiated agreement or litigation
- Restore natural resources and services
- Oversight & Monitoring
NRDAR IS NOT . . .

- Punitive
- A fine, penalty, or enforcement action
- Part of response or removal actions (aka – cleanup)
- Mitigation
- Compensation for economic losses

***THIS MEETING IS NOT ABOUT CLOSURE OF COAL ASH STORAGE FACILITIES***
NRDAR

WHY?
- To make the environment and public whole from injury to natural resources

HOW?
- Restore, replace, and/or acquire the equivalent of injured resources and ecosystem services lost

Credit: USEPA
Credit: VA DGIF
THE DAN RIVER COAL ASH SPILL
On Feb 2, 2014, stormwater pipe at Duke Energy Dan River Steam Station failed and released ash and ash pond water into the Dan River.

<table>
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<tr>
<th>EPA Release Estimate</th>
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<tr>
<td>Water</td>
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<td>Ash</td>
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Credit: USEPA
SUMMARY OF THE RELEASE

- Trustees engaged in spill response
  - Technical assistance on sensitive resources
  - Ephemeral data collection
- Interagency Workgroup
- Early exploration of restoration options
**POTENTIAL SPILL INJURIES**

**Natural Resources Affected**
- Freshwater fish
- Migratory birds
- Lands (wetlands, floodplain, instream)
- Aquatic and terrestrial plants
- Invertebrates
- Surface waters and sediments

**Services Affected**
- Recreation
- Habitat for species

Credit: USFWS
DAN RIVER NRDAR TIMELINE

- 2/4/2014: Spill at Dan River Steam Station
- 3/2014: Preliminary assessment of monitoring data; notice of intent to initiate NRDAR
- 5/2014: Trustee council formed
- 6/2014: Joint participation agreement with Duke Energy
- 10/2014: Public input solicited on possible restoration
- 12/2014: Summary of public restoration input released to public
- 6/2015: Damage Assessment Plan developed and released to public
- 12/2015: Final Damage Assessment Plan released to public
- 2016 – Implementation of restoration projects and development of Restoration Plan
- 7/2019: Draft Restoration Plan released to public; settlement agreement with Duke Energy reached
PROPOSED RESTORATION PROJECTS, PUBLIC INVOLVEMENT AND NEXT STEPS
118 total respondents

Respondents included members of public plus 18 organizations

Projects the public most frequently supported have been implemented or are in progress including:

- Dam removal
- Adding new river access points
- Land acquisition (Mayo State Parks)

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<tr>
<th>CATEGORY</th>
<th>PROJECT SUGGESTIONS</th>
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<td>AVOIDED HABITAT LOSS</td>
<td>• 18 land protection opportunities suggested</td>
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<td>• Overlap with rare species and recreation</td>
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<td>FISH PASSAGE</td>
<td>• Dam removal in VA to benefit endangered Roanoke logperch (RLP)</td>
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<td>RIVERINE</td>
<td>• 6 project opportunities suggested</td>
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<td>• <em>Hydrilla</em> treatment, instream &amp; riparian restoration, water quality improvements</td>
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<td>RARE AND NONGAME SPECIES</td>
<td>• 5 project opportunities suggested</td>
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<td>• RLP, small anthered bittercress protection, riparian restoration, dam removal</td>
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<tr>
<td>IMPROVE FISHING EXPERIENCE</td>
<td>• Recommendations included 18 access points</td>
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<td>• Motor, canoe/kayak, and handicap</td>
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<tr>
<td>EXPAND RIVER-BASED RECREATION</td>
<td>• 22 project opportunities suggested</td>
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<tr>
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<td>• Park/trail improvements &amp; expansion, facilities, <em>Hydrilla</em> treatment, dam removal, ramp silt removal</td>
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PREFERRED ALTERNATIVE RESTORATION PROJECTS

- Acquisition and conservation of Mayo River floodplain and riverbank
- Aquatic habitat restoration in the Pigg River via removal of Power Dam
- Establishment of public boat launch facilities on the Dan River
- Improvements to the Abreu Grogan Park in Danville, Virginia
Review the Draft Restoration Plan and Environmental Assessment and provide comments

- Comment card at tonight’s meeting
- Review plan (select link to plan under “case documents”)
  https://www.cerc.usgs.gov/orda_docs/CaseDetails?ID=984
- Submit written comments to Sara_Ward@fws.gov or Susan_Lingenfelser@fws.gov or by mail
  (USFWS Virginia Field Office, 6669 Short Lane, Gloucester, VA 23061, Attn: Dan River Restoration Plan)

Check out the restoration projects that have already been implemented – learn about them at information tables tonight then get outside and enjoy them!
THE NEXT STEPS

- Public Comment period closes
  September 9, 2019
- Summary of comments and responses provided
- Finalize restoration plans
- Complete on-the ground restoration!
THANK YOU

Sara_Ward@fws.gov
or
Susan_Lingenfelser@fws.gov