

Non-Powered Dam (NPD) Explorer Tool

Meeting #2: Beta Review

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Meeting Purpose & Agenda

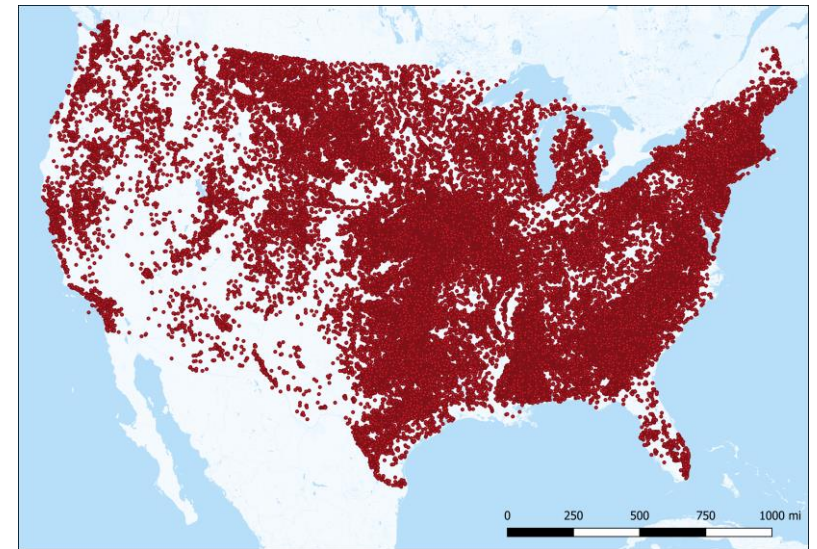
- **Workshop Purpose:** discuss NPD Explorer tool feedback after a 3-week period of trial runs.
- **Agenda:**
 - Introduction
 - Review Questionnaire
 - Open Discussion / Q&A



NPD Data Access and Classification

December 2020 ORNL Virtual Workshop: (<https://smh.ornl.gov/media/>)

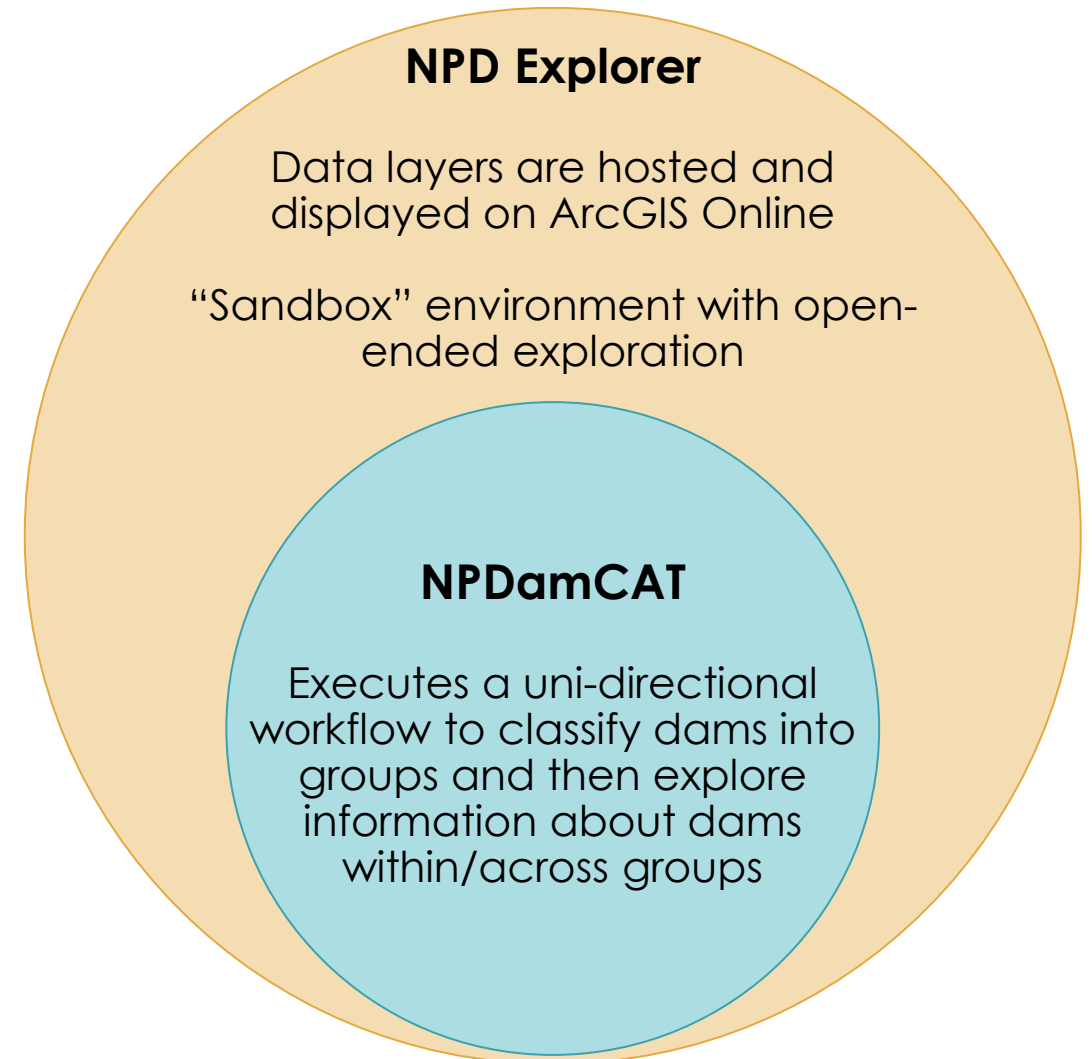
- NPD Data Challenges
 - Large population of dams in the US
 - Data availability
 - Data quality
 - Variety of stakeholders and interests in dams
- Classification Objectives
 - Improve understanding and inform decision-making
 - Reduce burden of early-phase NPD exploration



Data source: USACE National Inventory of Dams

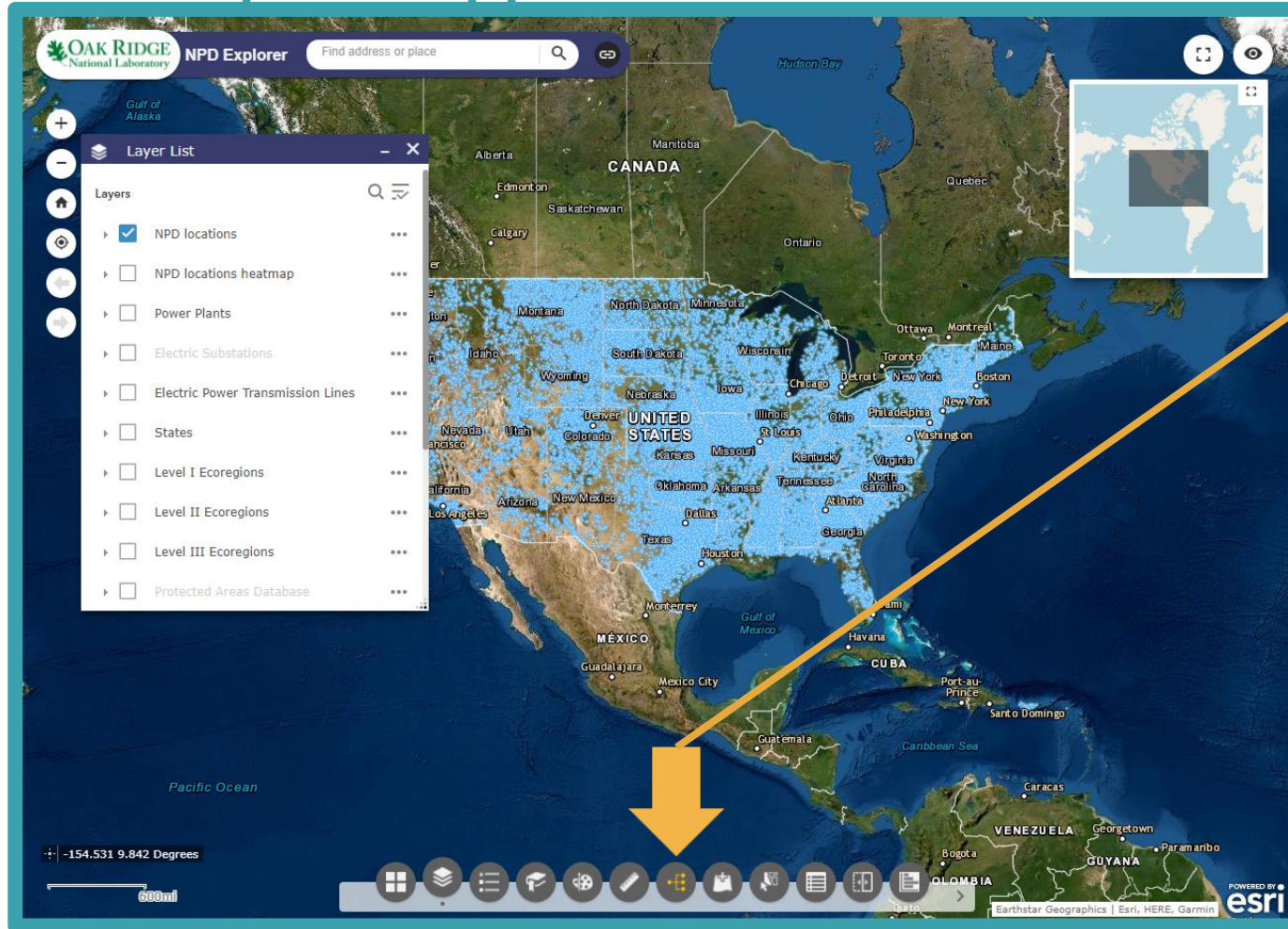
Development of NPD Explorer and NPDamCAT

- **NPD Explorer** – focuses on NPDs and supports variety of interests (not just hydropower development)
 - Web-based application for exploring NPD characteristics, including development opportunities
 - Uses interactive mapping/geovisuals
 - Features a unique tool (**NPDamCAT**) that facilitates alternative approaches for data exploration, including more powerful classification than “out of the box” apps
 - NPDamCAT: Non-Powered Dam Custom Analysis and Taxonomy
- Tools and data will be housed on <https://hydrosorce.ornl.gov>



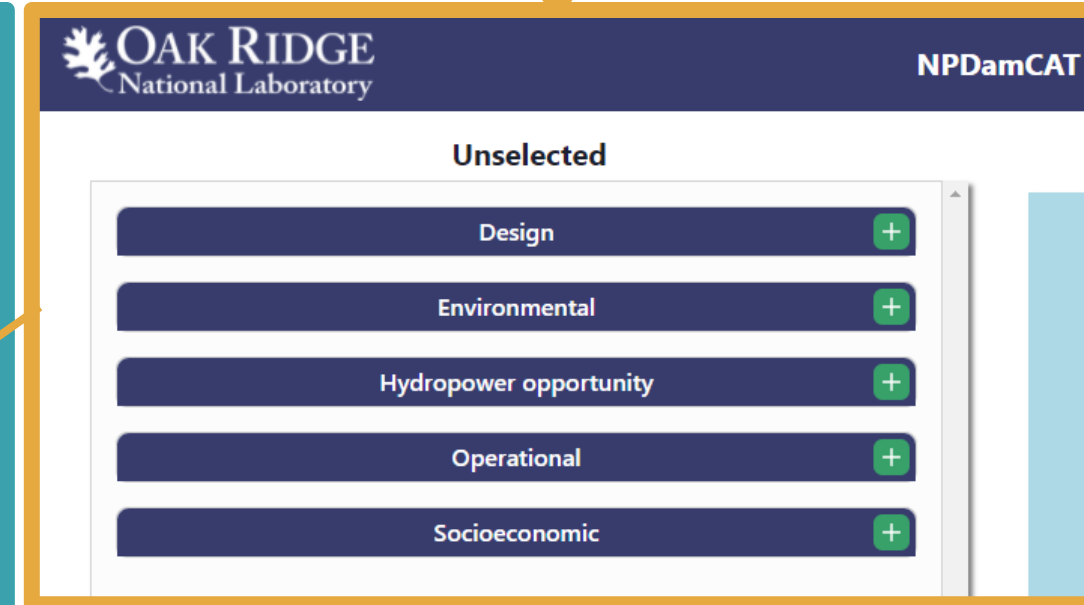
High-Level Overview of NPD Explorer & NPDamCAT

NPD Explorer app



Default display upon entering NPD Explorer

NPDamCAT widget



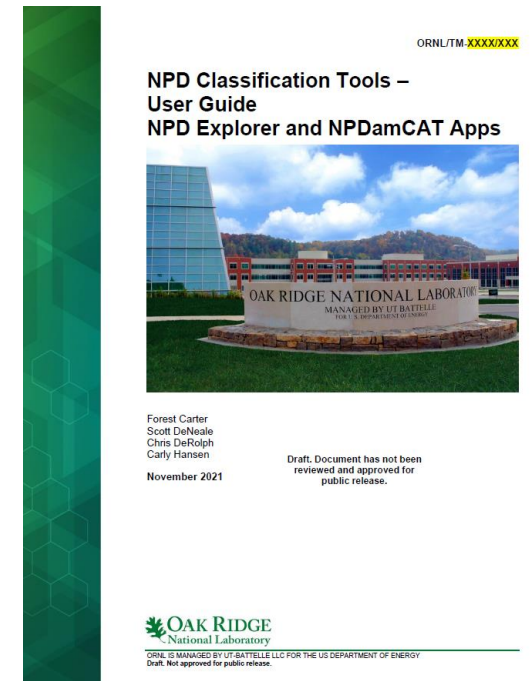
Top-level categories of characteristics as displayed in NPDamCAT

**Same data,
different user experiences**

NPD Explorer Resources

Thank you for your willingness to participate!!!

- Links to various resources have been provided:
 - Beta version of NPD Explorer tool
 - Draft version of associated User Guide
 - Accompanying video tutorial demonstrating tool use
 - **QUESTIONNAIRE**



User Guide cover

Participant Introductions



Participant Introductions

- State your name
- State your organization
- Identify your stakeholder “type”
- Briefly explain your interest in NPDs

Stakeholder “Types”



Questionnaire

- <https://forms.office.com/g/WrezUKuidg>



NPD Explorer Questionnaire (Questions 1-5 of 10)

- 1.(Optional) Please provide your name.
- 2.What is your interest in NPDs and how do you anticipate potentially using this tool?
- 3.What challenges do you currently face when accessing and using NPD data?
- 4.What worked well for you in the tools? What did you enjoy?
- 5.What was challenging about using the tool for your area of interest? What did you dislike?

NPD Explorer Questionnaire (Questions 6-8 of 10)

- 6. What other ways do you see this tool being useful? What other stakeholders might have interest in using the tool? How?
- 7. What additional feature or information is necessary for you to successfully use the tool for your goal?
- 8. Would you find the addition of pre-defined, clustering-based data useful? For reference, clustering could involve grouping dams based on common themes of characteristics (e.g., design, environmental, hydropower opportunity, operation, or socioeconomic) or with respect to objectives (e.g., hydropower development, removal, retrofit for fish passage or water quality improvements, etc.)

NPD Explorer Questionnaire (Questions 9-10 of 10)

- 9. How can the user experience be improved?
- 10. What are the best methods to market and train users for these tools?

Questions and Discussion

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