



Update: Open Water Data Initiative

Presentation to the Federal Geographic Data Committee
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Ed Clark, NOAA National Weather Service
Al Rea, USGS National Geospatial Program

Subcommittee on Spatial Water Data

OWDI as a Challenge

- ◆ Access to water data is difficult
 - Collected by hundreds of organizations
 - No common infrastructure
 - WaterML2 new exchange standard (O&M)
- ◆ Understanding connections requires a geospatial framework
 - Landscape to stream
 - Stream to stream



Open Water Data Initiative

Water Data Catalog	Water Data As a Service	Enriching Water Data	Water Data and Tools MarketPlace
Find Source Data	Consensus standards	River routing	Community exercise of tools & data
Create water & climate themes	Water Map Themes	Coupling with models	Data usage tracking
Recruit/engage partners	High performance data delivery	Grounded to geofabric	Community-built extensions

Technical: National Water Data Infrastructure

Social: Open Water Web

OWDI Activities To Date

4

- ◆ **FGDC** Steering Committee (6/26) and **ACWI** (8/19) voted unanimously to revitalize and charge the Subcommittee on Spatial Water Data to scope and design a national Open Water Data Infrastructure
- ◆ **AWRA** National Meeting (Nov 3-6, 2015) special track on OWDI.
 - [Call for OWDI Abstracts at AWRA](http://www.awra.org/jawra/jawra-owdi-call.html) (source: <http://www.awra.org/jawra/jawra-owdi-call.html>)
- ◆ **Subcommittee on Spatial Water Data (SSWD)**
 - Seven meetings since August
 - 40+ regular attendees, mailing list of 80+
 - > 30 organizations represented
 - Applying “Lean Startup” principles
 - Three initial use cases
 - Four data work groups
 - Technology/standards work group

OWDI Working Groups



Work Group 1:

National Flood Interoperability Experiment

- ◆ Identify flood data including stream-flow observations, forecasts and impacts
 - ◆ Developing *Hydrofabric** v 0.1 and exploring data conflation
- *Supported by 3 sub-teams



Work Group 2:

Drought Decision Support System

- ◆ Identify water resources data including natural flow, reservoir storage and drought impacts
- ◆ Explore visualization of drought in Lower Colorado



Work Group 3:

Spill Response Tool

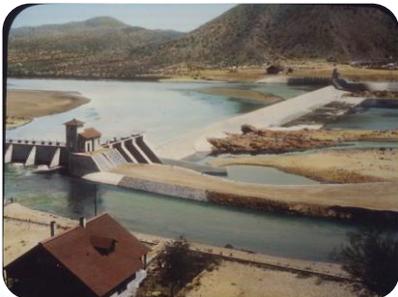
- ◆ Identify water quality data including potential points sources and impacts
- ◆ Exploring requirements for new/additional data (e.g. velocity forecasts and reservoir residence times)

OWDI Working Groups, Cont'd



Work Group 4: Technology

- ◆ Establishing Technology *Ideals* (draft):
 - ◆ Information owner responsible/maintains control
 - ◆ Data available in common formats
 - ◆ Machine interfaces are generalized according to standards
 - ◆ Data uses machine interpretable documentation
- ◆ Supporting the Work Groups with technical diagram and use-case templates



Work Group 5: Water-Use

- ◆ Identify and cataloging water-use related data sets and supporting metadata
- ◆ Exploring a process to facilitate exposure of these data to the open water data community
- ◆ Exploring data quality and governance questions

OWDI Early Observations

◆ **Broad and Diverse Participation**

- Federal Agencies
- State/Regional Government
- Private Sector

◆ **Highly Collaborative relationships**

- Interagency sharing of subject matter expertise
- Detailed respectful dialog



Questions

