

ACWI Monitoring Challenge Work Group

Innovations and R&D Sub-Group Progress Report

Monday April 22, 2013
During Full Work Group Scheduled Meeting

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Objectives

- Demonstrate Progress
- Present Initial Thoughts
- Hear Feedback
- Set Schedule
- Invite Volunteers to Join



Key Considerations & Factors

- Short-Term vs Long-Term:
 - Perception of No Short-Term Possibilities
 - BUT: Importance of Getting Started NOW
- Outside-the-Box Thinking
- Willingness to Re-Explore Options
- KISS Principle



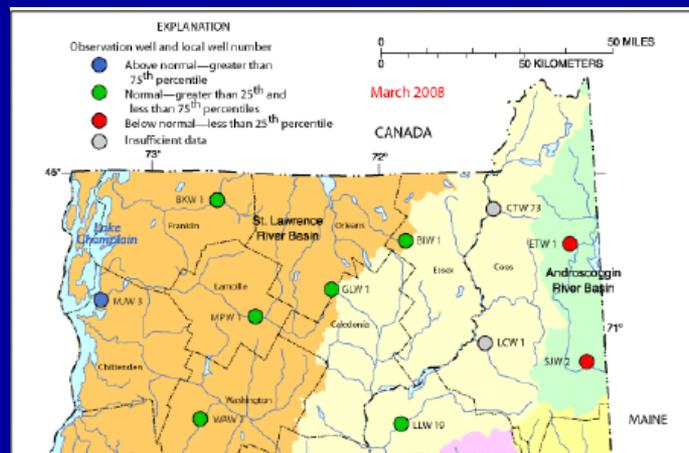
Key Linkages

- Funding Considerations & Possibilities
- Data Quality – QA/QC, Stds, Procedures...
- Involvement & Leveraging of:
 - Private & Academic Sectors
 - “Drivers” & “Market Forces”
 - “Business Attitude”



Our Sub-Group Approach

- Compile Thoughts from Prior Mtgs
- Develop “Scenarios” & ID Case Studies
- Brainstorm Ideas & Offer Examples
- Draft Initial Report-Out & Submit
- Address Feedback & Submit Report Portion



Scenario A

USGS – Private Sector Collaboration

- Case Study: Nitrate Probe Evaluation
- USGS Role:
 - Unbiased Evaluation (“UL Approval”)
 - Test Deployment & Reporting of Results
 - Education & Training
- Private Sector “Drivers”:
 - Getting Approval / High Ratings → Profits
 - Unbiased Basis of Comparison

Scenario B

“X-Prize” for Water Monitoring

- Case Study: X-Prize for Space Travel
- USGS Role:
 - Unbiased Evaluation OR...Active Competitor
 - THEN....Education & Training
- Private & Academic Sector “Drivers”:
 - Competition → Recognition → Business Case
 - Prize Value (Monetary & Public Relations)
- Overall “Driver”: Advancement of Technology

Scenario C

USGS – Service to Other Agencies

- Case Study: USGS CIDA & USDA Service
- USGS Role:
 - Specialty Service (e.g. Web Data Portal)
 - Deployment, O&M, Education & Training
 - Rate-Payer Based “Profit Center”
- Other Agency “Drivers”:
 - Budgetary Savings
 - Reliability of Service & Water Knowledge
- Private Sector Competition Concerns

Brainstorm Ideas – Technology & Tech-Transfer

- Remote-Sensing – Streamflows & GW Levels
- Smart-Phones / Tablet Computers
- Education & Training → Prof Orgs / CEUs

→ Getting More Ideas Now.....Need Yours

Brainstorm Ideas – Funding & Collaboration

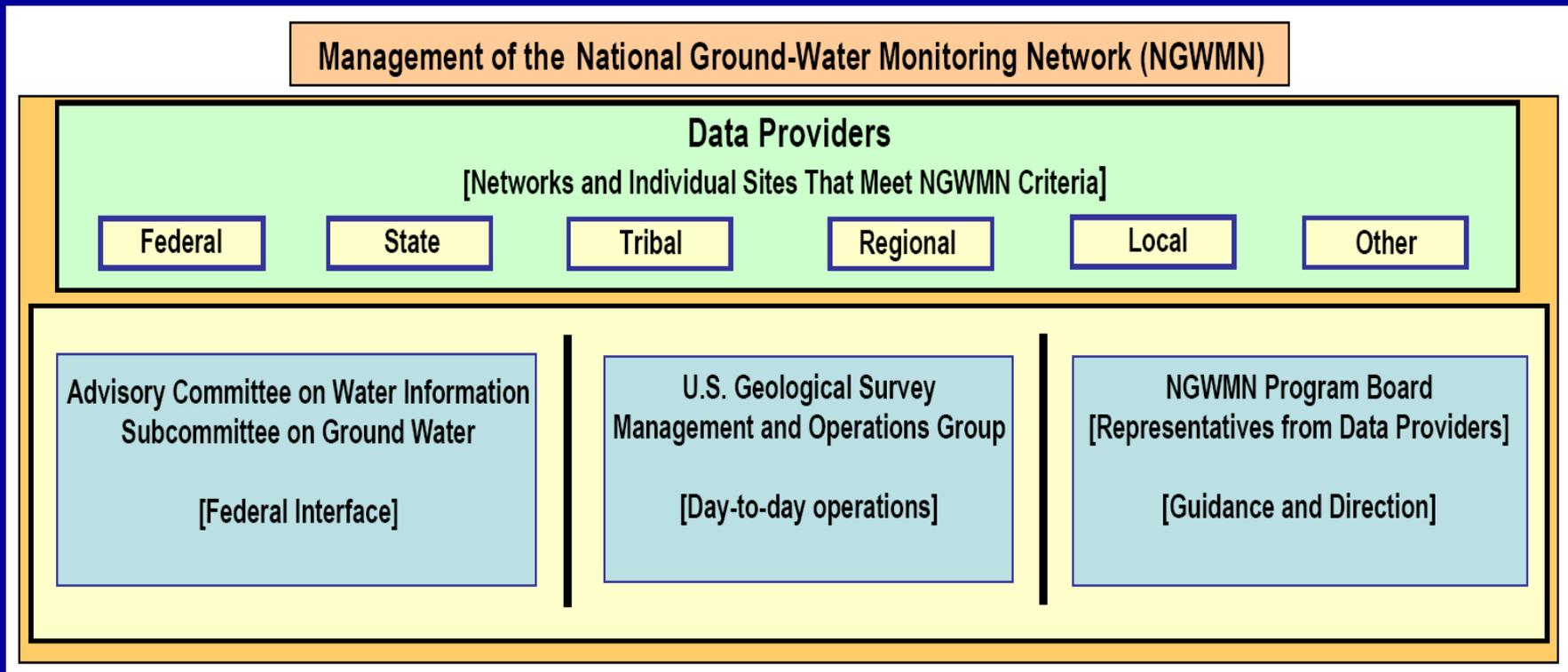
- FED Agencies as “Rate-Payers”
- Cost & Quality of Non-USGS Data Collection
- Academic Sector: NSF, NRC, others...
- Private/Municipal Sector: Other “X-Prizes”?

→ Getting More Ideas Now.....Need Yours

Recommended Approach – Overall Concepts

- Select Appropriate “Model” Program**
- Representation: All Sectors & Stakeholders**
- Oversight & Guidance: ACWI**
- USGS – Multiple Roles & Responsibilities:**
 - Education & Training**
 - Testing & Vetting**
 - Continued Data-Collection & Data-Serving**

Recommended Approach – One Specific “Model”



Recommended Approach – Implementing This “Model”

- From SOGW’s National GW Network Framework**
- Key Implementation Aspects**
 - Innovation & Idea “Ownership”**
 - National Innovation / R&D Program Board**
 - Significant Ongoing USGS Roles & Responsibilities**
 - ACWI Oversight & Federal Agency Interaction**

Q&A and Discussion

Detailed Slides – Addendum

Use if Q&A Requires

Acknowledgements

- SOGW Members and contributors
- ACWI, NWQMC, & other ACWI groups:
 - Coastal network
 - Ongoing support, guidance, & interaction
- Exec Secy & admin support
 - NGWA
 - USGS HQ & CIDA
- Many others

Interaction & Collaboration – Key Opportunities

- Technical challenges:
 - Web-based data-delivery
 - Multiple data providers
- Drivers & focus areas:
 - FED agency initiatives
 - SECURE Water Act provisions
 - User needs (FED, State, Tribal, private, etc.)