The National Ground-Water Monitoring Network (NGWMN)
A Progress Report and an Invitation to Participate

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Presenter – with acknowledgements to:
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Daryll Pope, Liaison to Data Providers, USGS
Lauren Schapker, SOGW Executive Secretary, NGWA

Presentation Outline
• Network Definition and Purpose
  • Network Development
    – Timeline
    – Participants
    – Design Criteria
    – Implementation
• Funding & Growth
• Invitation to Participate

Why Do We Need the Network?
• Trend-Tracking
• Impacts-Identification
• Analysis & Assessment
• Planning & Management
• “Patchwork Quilt” ➔
  – Data Provider Differences
  – Interstate Contrasts
• Fill Data Gaps

Subcommittee on Groundwater (SOGW) within ACWI
• Sole Initial Purpose – NGWMN
• Co-Chairs – Federal & Non-Federal
• SOGW Members:
  – ACWI Representatives & Alternates
  – Interested Individuals
  – “Listeners”

Goals of Presentation
• Show Progress toward Full Implementation
• Encourage You to Participate
• Introduce Related Presentations

• Wearing 2 Hats:
  – Federal Advisory Committee
  – NGWA Volunteer

Definition of “Network”
• Selected, Key:
  – Monitoring Points
  – Parameters
• Purposes in Design ➔
  • NOT a “Repository”
• Can Access Repositories:
  – Federal: NWIS, STORET
  – States’ and Other Entities’
Timeline

- Long Process
- But, Worthwhile
- Leveraged:
  – Prior Attempts
  – “GW Vacuum”

2005-6 NGWA White Paper
2007 SOGW formed by ACWI
2009 Framework Document
2009-11 Five pilot projects
2011 Web portal version 1
2013 Framework Document revisions
2013-17 Web portal updates
2014 WQ piloting – 2 States
2014 Federal Funding Approved
2015+ Formal Implementation

Initial Involvement

- All Sectors
- Significant Commitment
- Dedicated Volunteers

>70 people from >54 organizations

Key NGWMN Design Criteria

- Network
  – Not a repository
- Flexibility
  – With basic requirements
- Inclusivity
  – Fostering partnerships
- Ownership
  – By data providers
  – Not by federal agencies

Available at http://acwi.gov/sogw

Approach

- Framework Design
- Pilot Testing → Web Portal
  Operations
  – By USGS
- Oversight
  – Program Board
  – ACWI-SOGW

Available at http://acwi.gov/sogw

NGWMN User Interface

- Web Portal Main Page
- Has Link to Info on Cooperative Agreements

Available at http://cida.usgs.gov/ngwmn

Funding History

- Another (Very) Long Process
- Persistence
- NGWA Leadership
- Key Partner Organizations (GWPC, AASG, & Many Others)

2007-8 Initial Congressional Visits
2009 SECURE Water Act Authorization
2009-14 Stalled Appropriation but Continued Congressional & Federal Agency Visits
FY2015 Initial Appropriation
FY2016+ Further Appropriations with Small Increases or Level Funding
Initial Growth of Network

- Pilot studies – initial to completion
- USGS water-level and WQ sites
- New data provider projects
- Continuation projects

Annual Funding Opportunities for Cooperative Agreements to Support the Network
(Unfunded Participation Can Also Be Arranged)

Water-Level Network
Data Providers & Current Projects

Note: Already out-of-date due to recent additions

Water-Quality Network
Data Providers & Current Projects

Note: Already out-of-date due to recent additions

Network Growth
(# of Sites)

Cooperative Funding Opportunities

- Priority
  - Bring in New Data Providers
  - Support Existing Data Providers
- Supported work
  - Fill gaps in Site Information
  - Well Maintenance
    - Redevelopment
    - Integrity testing
    - Period-pumping
  - Well Drilling
    - Replacement
    - New

Network Growth
(# of Sites – USGS vs States)

- Priority
  - Bring in New Data Providers
  - Support Existing Data Providers
- Supported work
  - Fill gaps in Site Information
  - Well Maintenance
    - Redevelopment
    - Integrity testing
    - Period-pumping
  - Well Drilling
    - Replacement
    - New
Other Benefits for Data Providers

- Consistent Data for Sharing (Interstate & Intrastate)
- Identification of Data Gaps
- "Community of Practice"
- Upgraded Procedures & Documentation
- Web Portal Advantages:
  - Tools for Accessing Data
  - Linking back to Data Providers' Websites
- Leveraging Opportunities:
  - Visibility & Recognition
  - Additional Justification for Monitoring

Primary Contact for Data Providers

- Daryll Pope – USGS Liaison
dpope@usgs.gov
(609) 771-3933

http://acwi.gov/
http://acwi.gov/sogw/index.html
http://cida.usgs.gov/ngwmn/

Volunteers Welcome for ACWI-SOGW Efforts

- NGWMN – Still Our #1 Emphasis
- But: ACWI Just Approved Taking on More
  → You Can “Drive” New Activities/Tasks

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Volunteers Needed for NGWA Efforts

- NGWA’s DC Fly-In & Home Office Visits
  → 2018 Fly-In → March 6th & 7th (register in January)
  - Legislative “Asks”
  - Executive Branch Agencies
  - Assisting NGWA’s ACWI Rep
  - Govt Affairs Committee/Subcommittees

Benefits for Volunteers

- Influence Decision-Makers
- Understand Process / Re-Learn “Civics”
- Broaden Personal & Business Networks
- Participate on Dynamic Teams
- Learn About Latest in Data-Delivery
- Gain Satisfaction with Successes
- Enhance Recognition

Presenter’s Memorable Accomplishments

- Team-Building & Successes
  → Wonderful Network Across USA & Beyond
  → Camaraderie during Ongoing Team Efforts
- Congressional Office Visits:
  → 5 Senators, 1 Representative, Many Staffers
  → Advice for Author of SECURE Water Act
  → “Go-To” Expert for House Subcommittee
  → “Info Session” – House & Senate Staffers
- Recognition of Team Successes:
  → Invited Speaker at Brazilian GW Conference
  → ASCE/BSCES Newsletter Articles
  → BSCES “2016 Citizen Engineer of Year”
Contact Persons for Volunteering

- ACWI-SOGW:
  - Lauren Schapker, Exec Secretary
    lschapker@ngwa.org
  - Bill Cunningham, Federal Co-Chair
    wcunning@usgs.gov
  - Bob Schreiber, Non-Federal Co-Chair
    schreiberrp@dmsmith.com
- NGWA:
  - Lauren Schapker, Govt Affairs Director
  - David Langseth, NGWA’s ACWI Rep
    dlangseth@gradientcorp.com

Conclusions and Q&A

- You Can & Will Make a Difference
- Multiple Opportunities Exist
- Contact Persons Are Ready to Help You

Questions?

Focus of Presentation

- Example of Successful Cooperation:
  - Federal
  - States
  - Other Govt
  - Private Sector
  - Academic
- Continued Support:
  - NGWA
  - Other Partner Orgs

Network Portal Data Model