National Ground-Water Monitoring Network Cooperative funding opportunity

2021 NGWMN Funding Opportunity

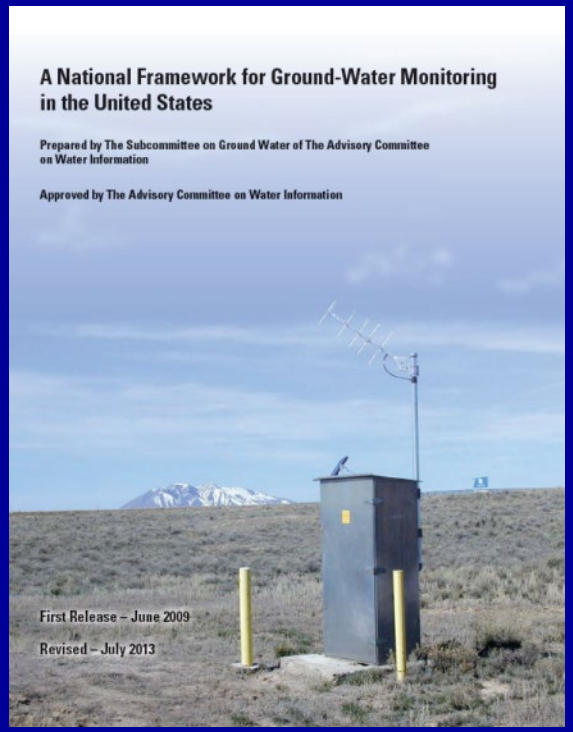
Daryll Pope, USGS

National Ground-Water Monitoring Network

- The Subcommittee on Ground Water (SOGW) of the Advisory Committee on Water Information (ACWI) worked to establish the National Ground-Water Monitoring Network (NGWMN)
- Recognized need for data to assess groundwater conditions nationally and regionally
- Approach
  - Created the 'Framework Document' with network design
  - Began implementation in 2015
  - Established management structure that includes the SOGW, USGS, and the NGWMN Program Board

Framework Document

- Design for a collaborative National GW Monitoring Network
- Subnetworks
- Guidance for Field Methods
- Guidance for Minimum Data Elements, Standards, & Management
- Implementation Plan and Recommendations
- Initial version in 2009. Revised in 2013 after pilot phase completed



NGWMN Design Elements

- Principal and major aquifer scale
- GW levels and quality, focus on availability
- Willing data providers: State, Federal, Tribes, others
- Priority on sites with long-term data
- Network, not a Warehouse or Master Database
- Sites selected and classified by local experts/data providers
- Sites stored in NGWMN Well Registry
- Data provider is the authoritative data source

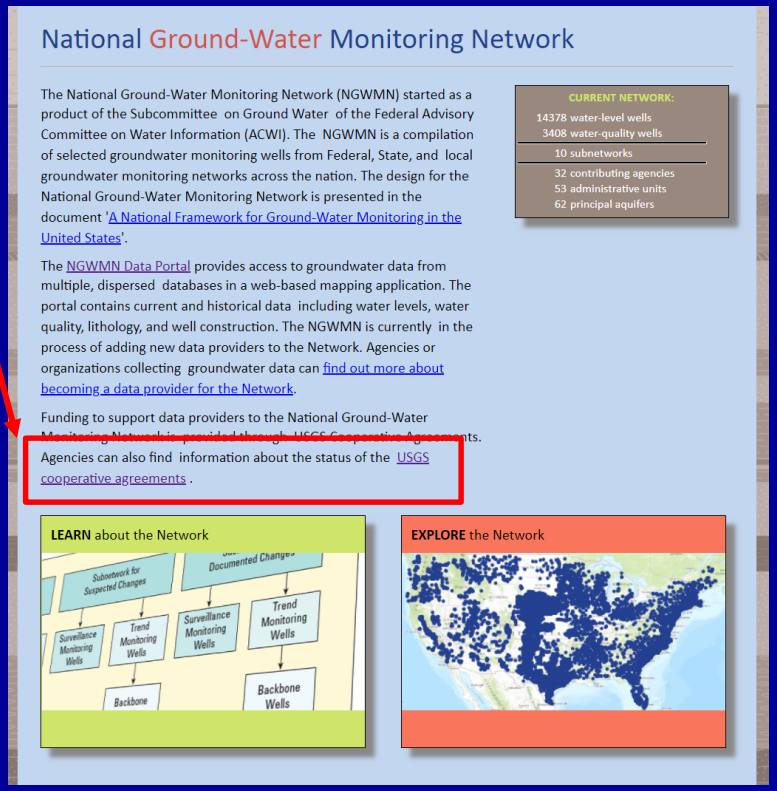
Cooperative funding agreements to support NGWMN data providers

- Authorized as part of Secure Water Act of 2009

  P.L. 111-11 SECURE Water Act 2009
- Established under CFDA 15.980
- Funding opportunity available to State or Local groundwater resource agencies
  - Federal agencies, Tribes, institutions, and companies may contribute data, but are not eligible for funding
- Funded annually through Congressional appropriations

More Information

- NGWMN Cooperative Agreements page on Portal
  - Info on past projects
  - Link to application package
  - Information on changes
  - Links to Informational Sessions
    - October 15th
    - November 12th
    - December 9th (Q&A)
  - Resources for Proposals
    - Spreadsheet with budget template
    - Spreadsheet with example budgets
    - Shapefile current NGWMN sites
    - Shapefiles of Principal Aquifers and Glacial aquifers
  - My contact information



Funding Opportunity for 2021

- Application period is open from September 28, 2020 through January 21, 2021
- Six objectives are supported
  1. Support to become a new data provider
  2. Support persistent data service from existing data providers
  3. Filling gaps in information at NGWMN sites
  4. Well Maintenance
  5. Well Drilling
  6. Purchase equipment for continuous water-level data collection
- The last three objectives are available to current data providers only

Grants.gov Application Package

Grants.gov 2021 page

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G21AS00008
2021 National-Ground Water Monitoring Network
Department of the Interior
Geological Survey

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SYNOPSIS | VERSION HISTORY | RELATED DOCUMENTS | PACKAGE

Print Synopsis Details

General Information

Document Type:	Grants Notice	**Version:**	Synopsis 1
Funding Opportunity Number:	G21AS00008	**Posted Date:**	Sep 28, 2020
Funding Opportunity Title:	2021 National-Ground Water Monitoring Network	**Last Updated Date:**	Sep 28, 2020
Opportunity Category:	Discretionary	**Original Closing Date for Applications:**	Jan 21, 2021
Opportunity Category Explanation:		**Current Closing Date for Applications:**	Jan 21, 2021
Funding Instrument Type:	Cooperative Agreement	**Archive Date:**	Feb 20, 2021
Category of Funding Activity:	Natural Resources	**Estimated Total Program Funding:**	$1,800,000
Category Explanation:		**Award Ceiling:**	$300,000
Expected Number of Awards:	20	**Award Floor:**	$0
CFDA Number(s):	15.980 -- National Ground-Water Monitoring Network		
Cost Sharing or Matching Requirement:	No		

Eligibility

Eligible Applicants:	Others (see text field entitled "Additional Information on Eligibility" for clarification)
Additional Information on Eligibility:	State and local resource agencies

Application Process

- Applications need to be submitted electronically on Grants.gov under funding opportunity number G21AS00008
- Application needs to be submitted by someone with appropriate authority
- Need to be registered with Grants.gov
- Note that registration of new users can take up to three weeks. Suggest starting this process as soon as possible
- Program Announcement contains details on the Electronic Application Requirement

Changes in Program Announcement

- Clarified that the maximum funding is $150,000 for a one-year project and $300,000 for a two-year project.
- Clarified that the Network focuses on serving data at long-term active sites to address current groundwater availability questions
- Clarified that travel costs are not allowed under Objectives 1 or 2
- Clarified that adding 20 or more new sites to the NGWMN should be done under Objective 2B
- Added new section describing Objective 6 which supports equipment purchases for continuous water-level data collection at NGWMN sites
- Provided example of in-kind services match calculation
- Changed score of objectives based on the percent match. Instead of a penalty during scoring, objectives with at least 25% match will receive a scoring bonus. Objectives with at least 50% match will receive the largest bonus
- Added Section F which lists brief staff qualifications for staff working on any objective. Moved text about staff qualifications under each objective into this new section
- Tables of sites for Objectives 3-6 should include the Principal aquifer and the well depth
- Request labels of sites on maps, if possible

- Tasks listed in the work plan for each objective should be included on the detailed budget and the timeline for that objective
- Objective 2- Persistent Data Services
  - Requires a separate budget for Objective 2A and 2B so that the work can be evaluated and scored separately
  - When proposing to add new sites under Objective 2B a map should be included showing the potential new sites and the Principal Aquifer
- Objective 4- Well Maintenance
  - Clarified that a separate paragraph is not required for sites for which well-integrity testing is proposed. The work proposed for all sites can be summarized
  - Requested additional details for slug test work
- Objective 5- Well Drilling
  - When a replacement well is proposed, the original site should remain in the NGWMN to maintain the historic data
  - Cost estimates for each well should include the drilling costs and any other cost associated with each well (salary, travel, etc.). This allows partial funding of only some wells, if needed
  - Clarified that data collection at a new site to fill the minimum data requirements can be proposed under Objective 5 (geophysical logging, GPS work, and well integrity testing)
  - Added statement that all data collected at any new wells needs to be publicly available
- Objective 6- Purchase equipment to support continuous water-level data collection
  - Added new objective
  - Requires description of equipment to be purchased
  - Requires table of sites for which equipment will be purchased with basic information and the cost of the equipment
  - Federal salary costs can only be used to document the equipment purchases in the final report

Application package

- All Projects
  - Proposal Information Summary
    - Be sure to use the format shown in Attachment A of Program Announcement
    - New DOI grants system requires very specific information. If you change the Proposal Information Summary format, you may not be providing the information we require which could slow down or disqualify your proposal
  - Proposal
    - Details on each objective
  - Budget Summary
    - Use format shown in Attachment B of Program Announcement
  - Detailed Budget
    - Make sure to use formats shown in Attachment B of the Program Announcement. These formats contain the information we need to evaluate your proposal
  - Timeline
- Application must contain information above in a single document that is no longer than 25 pages
- Applicant will submit to Grants.gov along with required Standard Forms SF-424, etc.

Information required for all proposals

- Background information
  - Description of Agency and purpose of monitoring
  - Description of the Agency's existing monitoring networks
    - Water level
    - Water quality
    - Identification of USGS principal or other major aquifers monitored
  - Describe previous projects with the NGWMN. Include a table of funds awarded by Objective
  - Describe your IT Infrastructure
- Project Summary
  - Brief description of the project and objectives that will be included
  - Make sure to include tables of all sites listed for work under each objective. The tables do not count towards the page limit.

Project Description

- For each objective:
  - Work plan
    - Describe work and benefits to NGWMN
    - Identify personnel involved in work
    - Include table of sites for which the work will be done
  - Budget
    - Total cost to accomplish objective
      - Include overhead
      - List the in-kind services that will be used to match the work if they are not a part of the objective
    - Use format shown in section 11.C
  - Timeline

Objective 1: Support to become a new data provider

- Perform work necessary to become a data provider to the NGWMN. Costs typically range from $30,000 to $60,000 of USGS funds

- Work plan elements
  - Select and classify sites for the NGWMN
  - Provide required data elements for selected sites.
  - Populate the NGWMN Well Registry with site Network information
  - Connect databases to portal using web services
    - Water Level, Water Quality, Lithology, Well Construction
  - Document field and data management practices
  - Prepare a brief report documenting project

Objective 2: Support persistent data service from existing data providers

- Part A
  - Perform activities necessary to maintain persistent data services from agency databases to the NGWMN Portal
  - Generally from $5,000 to $20,000
- Part B
  - Occasional work needed to upgrade services or add new services or large number of new sites
- Work plan elements
  - Maintain list of sites in Well Registry (Part A)
  - Keep site information updated (Part A)
  - Populate data elements for new sites (Part A)
  - Maintain web services connection to Portal (Part A)
  - Routine updates to metadata (Part A)
  - Describe additional work (Part B)
    - Example: update web services because of database changes
  - Document work in report

Long-term data collection is not supported

Objective 3: Filling gaps in information at NGWMN sites

- Perform work necessary to fill metadata gaps in the required data elements listed in the NGWMN Framework Document.
- Allowable work includes
  - Data collection to fill metadata gaps (logging, GPS, sounding)
  - Data entry to fill metadata gaps (entry of lithology from logs)
  - Data entry to fill NGWMN data gaps (entry of historic data)
- Work plan elements
  - Description of the information gap
  - Planned approach to fill the gap
  - Description of field techniques, provide references
  - Include a table of sites
  - Include a map of sites
  - Describe plan to quality assure any new data
  - Document gap filling activities in the final report for the project

Long-term data collection is not supported

Objective 4: Well Maintenance

- Perform maintenance of wells in the NGWMN to ensure that data are of high quality.
- Examples include:
  - Well redevelopment
  - Pumping to maintain connection
  - Well-integrity testing
  - Well rehabilitation
  - Install surface casing
- Work plan elements
  - Describe the need for the maintenance
  - List the proposed activity at each well, describe approach
  - Include a table of sites
  - Include a map of sites
  - Include paragraph for each well describing need for work and planned approach
  - Document activities in the final report for the project

Long-term data collection is not supported

Cannot be part of new data provider project

Objective 5: Well Drilling

- Install wells to enhance or maintain the NGWMN.
- Work plan elements
  - Provide justification for each well. Include paragraph for each well describing need for well and how it fills a gap
  - Describe proposed drilling methods. Include references
  - Include drilling cost for each proposed well. Justify expensive methods
  - Provide a table of proposed wells
  - If the well is to be a replacement well for an existing NGWMN site, please list the existing site name and NGWMN number
  - Describe who will be drilling the well and that you will meet state guidelines
  - Document well drilling activities in the final report for the project
  - Suggest including a well construction diagram for proposed wells

Long-term data collection is not supported

Cannot be part of new data provider project

Objective 6: Equipment Purchase

- Purchase equipment to support continuous water-level monitoring at NGWMN sites.
- Allowable work includes
  - Cost to purchase equipment for continuous water-level monitoring. Pressure transducers and data loggers
  - Cost to install equipment is not allowed, can be used as match
  - Telemetry equipment purchase cannot be funded, but can be used as match
- Work plan elements
  - Description of need for equipment purchase
  - Description of how equipment fills gaps
  - Include table of equipment that will be purchased
  - Include table showing each well for which equipment would be purchased
  - Document equipment purchase work in final report

Budgets

- SF 424 budget form
- Budget summary for project (Attachment B)
- Detailed Budget
  - For each objective
  - Include in-kind services
    - If data collection at network sites is used as match, need to include in budget tables
  - Specify Indirect Cost rate used and include in budgets
  - Include detailed costs for contracted work. As shown in examples and described in section 11.C
- Use specified format for detailed budgets
- Please proofread budgets and make sure they agree

Project Report Requirements

- Described in Section 10 of Program Announcement
- New data provider projects
  - Summarize work done for the Project
    - Describe networks
    - Site selection approach
    - Site classification approach
    - Describe data collection techniques
    - Describe methods for quality assurance of data
    - Description of web services
- Existing data provider projects
  - Describe work to provide persistent data service
    - Web service status
    - Planned upgrades in databases that could affect portal
    - Document any work done under Part B
  - Describe any work done for the last 3 objectives
    - Site information gap filling
    - Well Maintenance
    - Well Drilling

Proposal Evaluation

- Each objective proposed will be evaluated and ranked by the NGWMN Program Board using the following criteria
  1. Proposal quality

     Considers the overall quality of the proposal. Were requirements met? Is it clear?
  2. Relevance

     Considers relevance and importance of the activity as it relates to the USGS NGWMN Program goals.
  3. Technical quality

     Considers the merit of the proposed approach, chance of success, attentions to NGWMN requirements, and completion of previous project.
  4. Budget

     Considers whether the proposed budget reflects the level of effort to accomplish the work. Also consider completeness and accuracy of detailed budgets.
- Objectives 1 and 2 are prioritized highest. All other objectives are ranked by score

Support

- Framework Document

  https://cida.usgs.gov/ngwmn/doc/ngwmn_framework_report_july2013.pdf

- NGWMN Web Page

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

  – NGWMN Cooperative agreements page

    http://cida.usgs.gov/ngwmn/cooperativeagreements.jsp

    - Includes Frequently Asked Questions

      http://cida.usgs.gov/ngwmn/cooperativeagreementsfaq.jsp

    - This Presentation

      Will be available on the Cooperative Agreements page shortly.

Tip Sheets

- Created to help data providers with common tasks
- Current tip sheets
  - NGWMN Subnetwork
  - NGWMN Monitoring Categories
  - NGWMN WL Criteria
  - NGWMN WQ Criteria
  - NGWMN Well Registry
  - NGWMN Minimum Data Elements
  - NGWMN Web services
  - Standard Elements for Water-Quality Web Services

https://cida.usgs.gov/ngwmn/learnmore.jsp#dataProviders

What Makes a Good Proposal?

- Paying attention to the ‘Points to Remember’ section is the best way to ensure you have a good proposal
- We have condensed the most important factors to consider when putting a proposal together into this one page summary
- The rest of this section on ‘What Makes a Good ‘Proposal’ is based on the ‘Points to Remember’ section and adds details to the points listed there

Points to Remember

- Please **contact Daryll Pope** if you have any questions.
- Ensure that the work you propose is submitted under the proper objective and that the work is eligible under that objective. Follow the requirements for each objective listed in Section 11.
- Applications which show an understanding of and reference to the Framework Document and Tip Sheets will be scored higher.
- Do not include work under Objectives 4, 5, or 6 in a proposal to become a new data provider.
- For Objective 1, make sure you include a map with your potential sites and any existing NGWMN sites in your state (including those from other data providers) and include the Principal aquifers.
- For Objectives 3-6, include a separate map for each objective that shows the sites where work is proposed and the Principal aquifers. For Objective 5, always show any existing NGWMN sites on the map in addition to any new or replacement wells.
- Include a scale bar, north arrow, and an explanation for each map. If the map is zoomed in for detail, make sure to include an inset map showing the location on a statewide map.

- If you are proposing work at specific sites for Objectives 3-6, make sure you include a table of the sites you will be working on. The table must include the NGWMN ID. All sites for which work is proposed (except new wells proposed for drilling) must be in the NGWMN Well Registry by January 21, 2021.
- For well rehabilitation and well drilling work, include a paragraph describing each well where work is proposed. This should include the need for the work, a description of the work planned, and how the work benefits or fills gaps in the NGWMN.
- Always include in-kind services match for each objective for any work proposed under Objectives 3, 4, 5, or 6. Objectives that have less than 50% match will be scored lower during proposal evaluation.
- Providing costs for individual work tasks under an objective can help us partially fund work within an objective during proposal evaluation. Itemize costs for individual work tasks done by contractors.
- Use the budget formats described in Section 11.C and depicted in the examples included in Attachment B.
- Consider NGWMN Well Density guidelines when proposing gap filling activities.
- Make sure the Budget Summary and the budget in the SF-424A form are consistent with the detailed budgets for each objective included in the proposal.
- Make sure to proofread your proposal before submitting.

Topics

- Points to Remember
- Getting help
- NGWMN perspective
- Maps
- Tables
- Drilling and Well Maintenance descriptive paragraphs
- Drilling considerations
- Well Maintenance considerations
- Equipment Purchases
- Match
- Budgets
- Contracts
- Proofreading proposal
- Ideal proposal is ‘Simple and complete’
- Proposal review criteria

Contact me

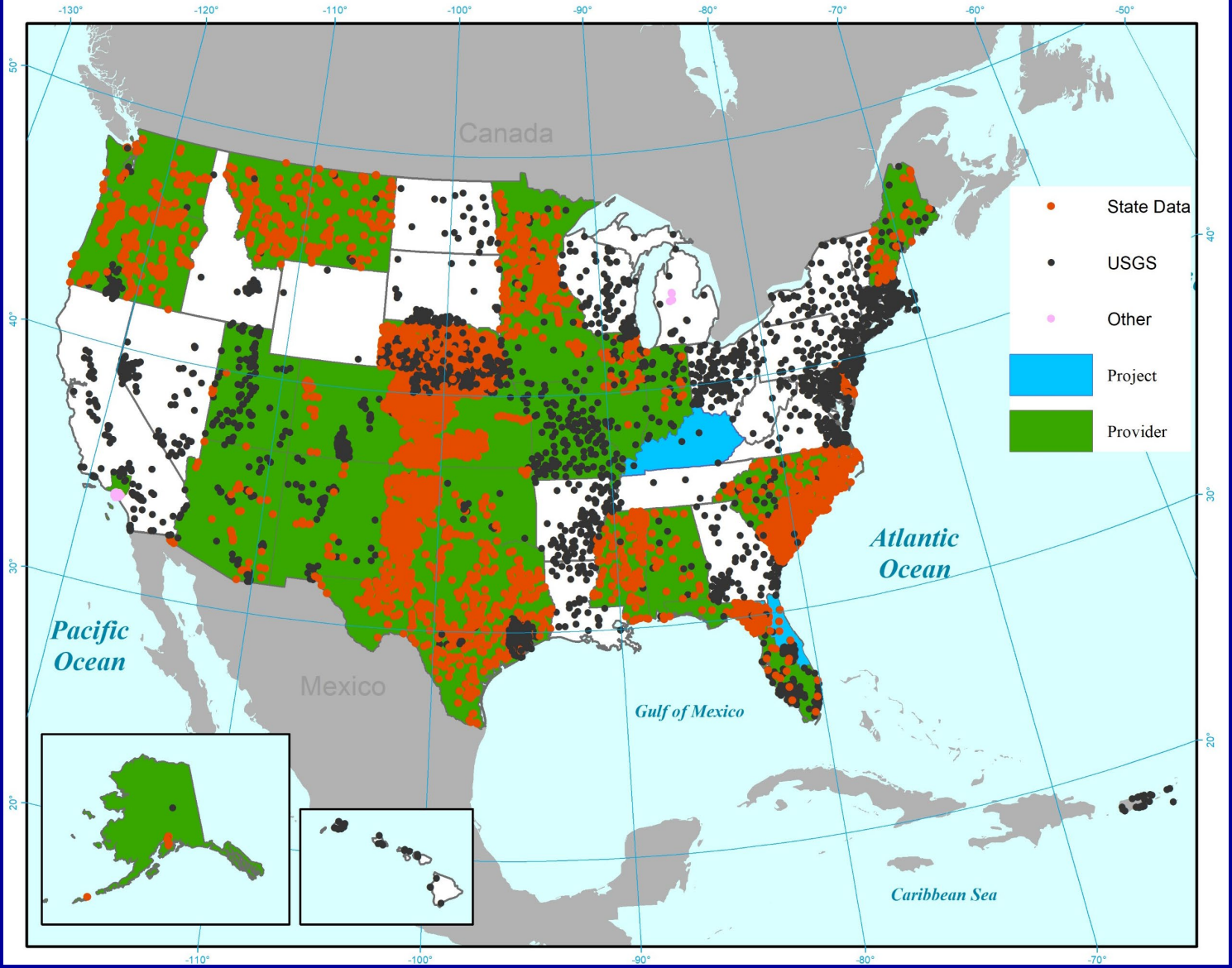
- I can answer questions about your proposal. Please contact me with any questions you have
- I cannot see or review your proposal before it is submitted
- But if you have questions about:
  - We want to do ___, is this allowed?
  - What Objective would ___ best fit it?
  - Is ___ allowed under Objective ___?

,Please contact me and we can discuss

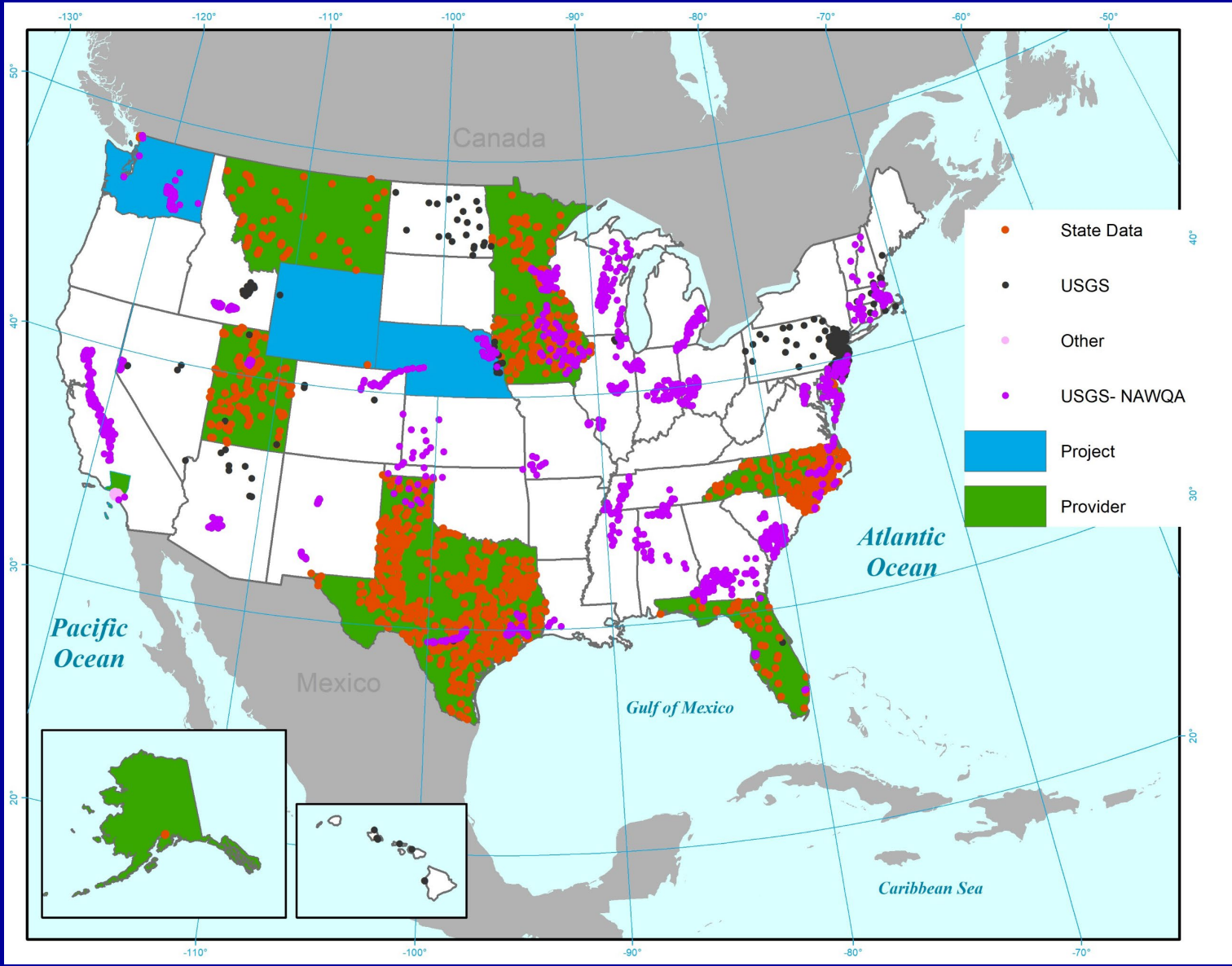
NGWMN Perspective

- The main goal of the funding opportunity is to develop and enhance the NGWMN. This means a principal or regional aquifer approach
- We do want the work that we fund to be beneficial to your agency. In most cases, proposed work can benefit the NGWMN and still meet your agency goals too
- Keep the NGWMN perspective and goals in mind when proposing work
- Always make sure that the benefits of the work to the NGWMN are clear in your proposal
  - Tie work to the NGWMN Framework Document
  - Refer to Tip sheets
  - Keep well density in mind
  - Focus on Principal and Major aquifer scale

Water-level data providers and current projects



Water-quality data providers and current projects



Maps

- Maps help convey lots of information
  - New Data Provider proposals (Objective 1) should show prospective sites to include in the NGWMN, existing current NGWMN sites in the area, and Principal aquifers
  - Proposals for Objectives 2-6 should show locations of all sites for which work is proposed under that Objective. These should also include current NGWMN sites, prospective sites, and principal aquifers as appropriate
- All maps should:
  - Have a scale bar
  - Have a north arrow
  - Have an explanation
- If a map is zoomed in, make sure there is an inset box shown on a map of the state

Map for new data provider project

- Explanation
- Scale bar
- Principal aquifers
- Potential sites
- Current NGWMN sites (CRN)

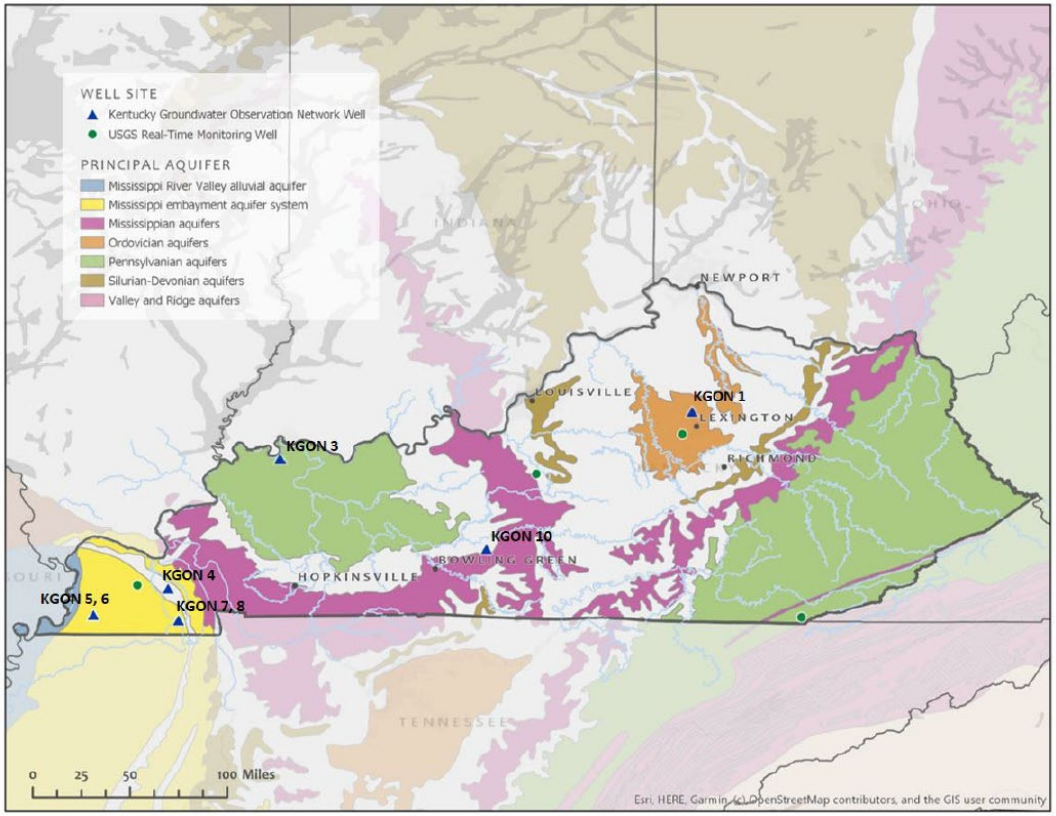


Fig. 2. Map showing locations of eight KGON well sites proposed for inclusion in the NGWMN in relation to nationally identified principal aquifer systems (U.S. Geological Survey, 2003), and locations of presently active USGS climate-response network wells.

Map courtesy of the Kentucky Geological Survey

Map for Objective 4 work

- Explanation
- Scale bar
- Principal aquifers
- Proposed sites
- Past and ongoing sites

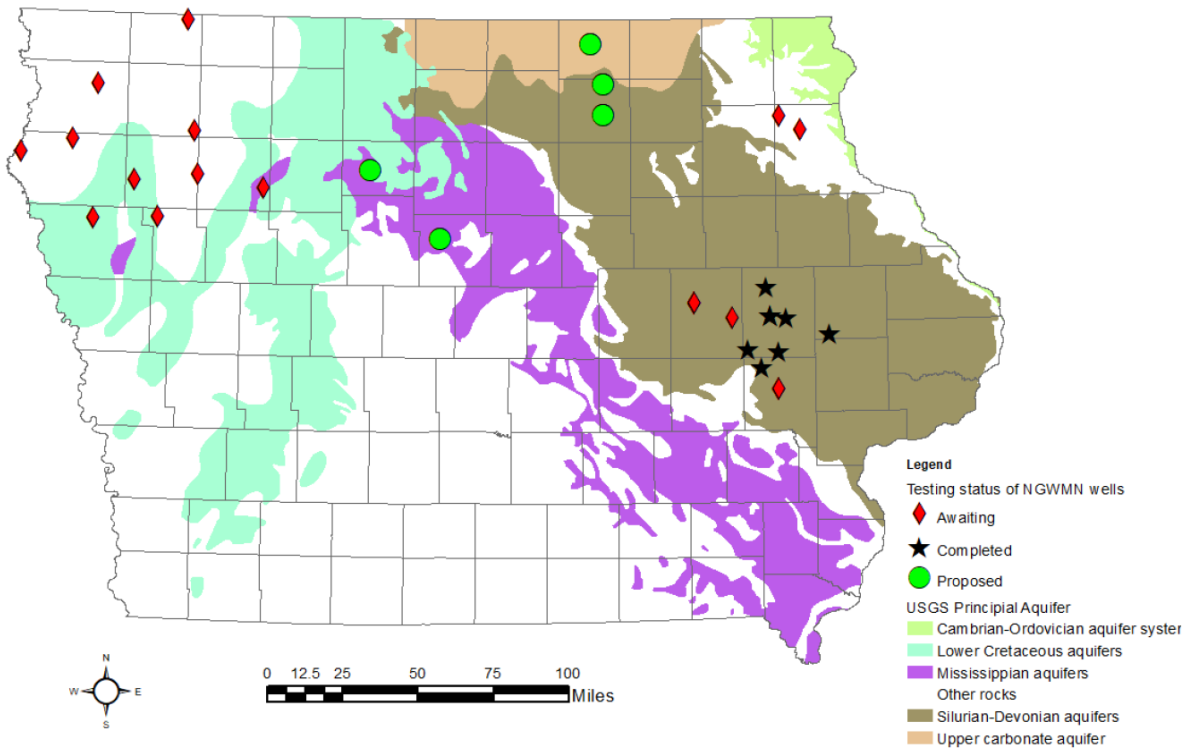


Figure 2. Status of hydraulic testing on NGWMN wells in Iowa.

Map courtesy of the Iowa Geological Survey

GIS Resources for Maps

- We have recently added some GIS data to the 'Data Providers' tab on the NGWMN Data Portal
  - https://cida.usgs.gov/ngwmn/learnmore.jsp#dataProviders
- You can now download a zip file that contains Shapefiles of the 'Principal Aquifers of the United States' and 'Aquifers of Alluvial and Glacial Origin'
- You can also download a zip file that contains a Shapefile of the sites in the NGWMN as of September, 2020
- These will be helpful in putting maps together for the funding opportunity.

Tables

- Sites for which any work is proposed under objectives 3-6, should be presented in a table
- The table needs to include the NGWMN-ID (Site Number)
- Therefore the sites need to be in the Well Registry on the date that proposals are due (January 21, 2021)
- Sites can be in the Registry and have display turned off if they do not meet NGWMN criteria yet, but if the proposed work would fill NGWMN gaps
- Having an estimated cost per well in the table is often beneficial
- Please show the Principal aquifer
- Describing work proposed at each site can be helpful

Example table of sites for well maintenance activites

Site Name	NGWMN ID	Aquifer	Estimated cost to pump to maintain aquifer connection	Estimated cost of conducting slug test
Briggs Woods #2	54285	Mississippian		
Briggs Woods #3	50000	Mississippian		
FM1-2	56978	Devonian		
FM1-3	56979	Devonian		
FM1-4	56980	Devonian		
FM2-2	56983	Devonian		
FM2-3	56984	Devonian		
FM2-4	56985	Devonian		
FM3-2	56988	Devonian		
FM3-3	56989	Devonian		
FM3-4	56990	Devonian		
Rutland Marsh #3	55575	Mississippian		
Rutland Marsh #5	54830	Mississippian		

Costs hidden

Costs hidden

Table courtesy of the Iowa Geological Survey

Drilling and Well Maintenance descriptive paragraphs

- For each site for which any well maintenance or well drilling work is proposed, you need to have a paragraph describing: The well identifier, the need for the work, the approach you are taking to do the work, and benefits of doing the work (to the NGWMN)
- Is helpful to include cost estimates for each well so that funding decisions can be made on a per well basis if needed
- Still need a table showing all sites for which you will do work
- Not need for slug testing or well pumping work.

Example well maintenance paragraph

Objective 4 – Item A
Well 02000380 (Ashland County – WI)
Site Number: 463635090481101
Site Name: AS-48/20E/24-0380
WGNHS Well ID: 2000380 (aka: **AS-380**)
Principal Aquifer: S300CAMORD
Description: This well was drilled to 217 feet below land surface (ft-bls), is located on the Bad River Indian Reservation, and has been monitored since 2011. The Well Construction Report (WCR) information is unknown. The recommended maintenance needs include a thorough review of all relevant historical well records, and a complete well evaluation. A full suite of borehole video and geophysical logs will be performed to fully characterize the well. A slug test will be performed to ensure proper well-aquifer response.
Party responsible for maintenance: The WGNHS will supervise all activities working in close coordination with the USGS-WIWSC.

Example courtesy of the Wisconsin Geological and Natural History Survey

Example well drilling paragraph

Objective 5 – Item A
Well 41000118 (Milwaukee County – WI)
Site Number: 430706087583601
Site Name: ML-08/21E/35-0118
WGNHS Well ID: 41000118 (aka: **ML-118**)
Principal Aquifer: N400SLRDVN
Description: This well was drilled in 1941 to a depth of 135 ft-bls with a casing depth of 124 ft-bls and monitored since 1946. This well is located on private property in a difficult-to-access area that does not allow for regular maintenance and repairs. Recent site visits have identified an obstruction at 77 ft-bls. Recommended maintenance needs include a thorough review of all relevant historical well records, a complete borehole evaluation including borehole video and geophysical logging followed by abandonment and replacement with a new well nearby in the same aquifer. The replacement well (see sketch below) will be drilled and operated concurrently with ML-118, before abandonment, to establish an overlapping water-level record between the two wells. A complete well characterization of the newly drilled well will be performed including borehole video and geophysical logs and slug testing to establish the hydraulic connection to the surrounding aquifer. A geologic log will also be produced and the WGNHS will process and archive drillers' cuttings from the new well at our Research Collections and Education Center (Core Repository) in Mt. Horeb Wisconsin. Considering the current condition of ML-118, assistance by a well service company will be needed to remove the well blockage prior to abandonment.
Party responsible for maintenance: The WGNHS will supervise all activities working in close coordination with the USGS-WIWSC and contractors selected to drill the new well and abandon the existing well.

Example courtesy of the Wisconsin Geological and Natural History Survey

Drilling considerations

- Well construction diagrams are very helpful and encouraged. Can use a generic one instead of needing one for each well
- Make sure you mention that you will meet your states well drilling requirements
- Specify that new wells and wells drilled as in-kind services will be added to the NGWMN
- Describe wells drilled as in-kind services using same paragraph format as for funded wells
- Justify any special drilling techniques proposed. Make sure additional cost benefits the NGWMN
- Drilling is construction. Need form SF-424D (Assurances for Construction Programs)

Example well construction diagrams

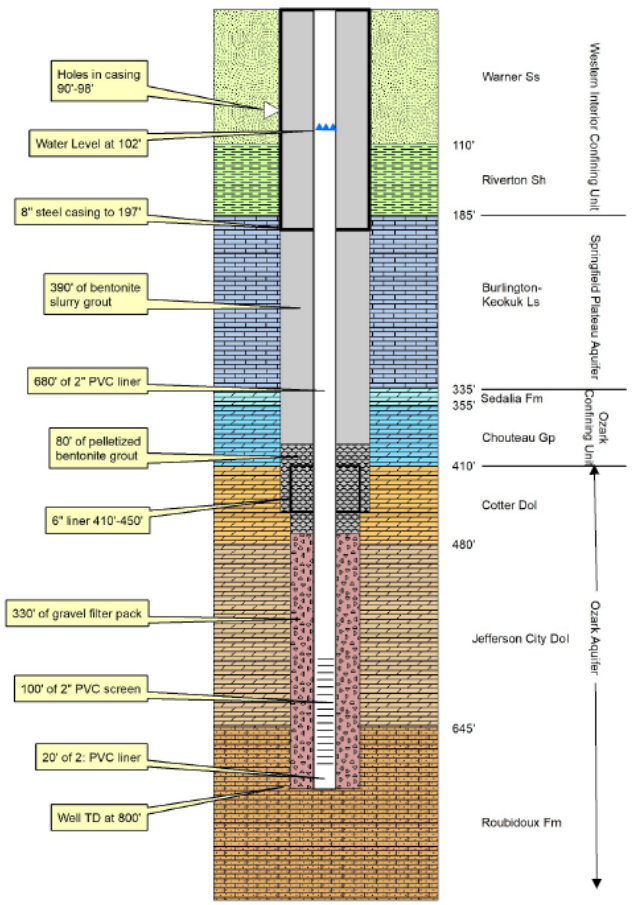


Figure 9: Rich Hill observation well reconstruction diagram

Diagram courtesy of the Missouri Department of Natural Resources

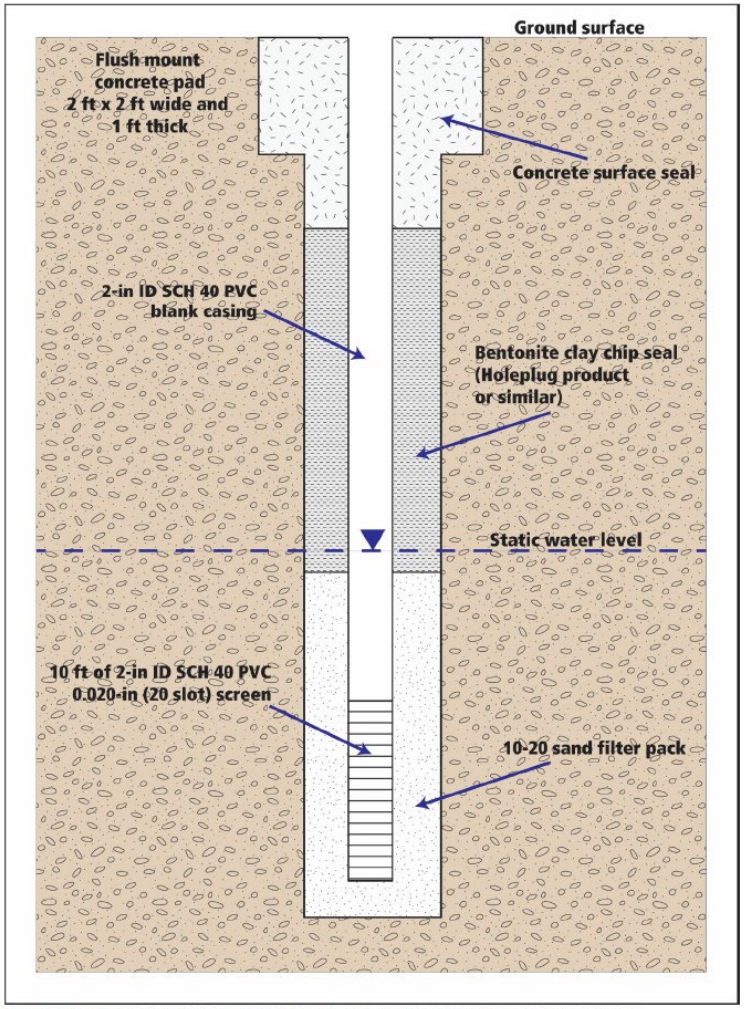


Figure 2. Preliminary well design for the Thurston County monitoring wells

Diagram courtesy of the Washington Department of Natural Resources

Well Maintenance considerations

- Make sure you explain the need for the work, your proposed approach, and how the approach will meet the needs for the work
- Include references for methods you will be using (can be links). This should be for data collection, data analysis, well rehabilitation, etc.
- Pictures can be very helpful for well maintenance work

Figures 2-5: Holes in casing identified by circles.

Missouri Department of Natural Resources

Montana Bureau of Mines and Geology

Maryland Geological Survey

Objective 6– Equipment purchase for continuous water-level monitoring

- Funding can only be used to purchase water-level monitoring equipment
- Salary to purchase or install equipment can only be used as in-kind services. Travel to install equipment can only be used as in-kind services
- Satellite telemetry equipment can only be used as in-kind services
- Requirements
  - Need table of equipment (Equipment Specs)
  - Need table of sites with equipment costs listed (Site List)
  - Include final cost in budget table (Objective 6 equipment budget)

Objective 6– Equipment Specs

Package	Abbreviation	Equipment	Type	Make	Model	PSIG	Base Cost	Per foot	Comment
Pressure Transducer/datalogger base	**PT/DL base**								**$1,675**
		Pressure Transducer/datalogger, 15 PSIG	combined	Trancorp	Model 1V	5-300	$1,300		
		Battery Pack		Trancorp	Basic		$300		
		Vented Cable Base	Vented	Trancorp	Tough-Quick		$75		
							$1,675		
PT cable per foot	**Cable**								**$5/per foot**
		Vented cable	Vented	Trancorp	Tough-Quick Vented			**$5.00**	
Cell phone telemetry add on pack	**Cell add on**								**$1,000**
		Cell Telemetry add on		Trancorp	CellLink		$1,000		used for in-kind services
Transducer base for satellite telemetr	**Base for Satellite**								**$1,075**
		Pressure transducer only, 15 PSIG	PT only	Trancorp	Model 2V		$1,000		
		Vented Cable Base	Vented	Trancorp	Tough-Quick		$75		
							$1,075		
Satellite add on	**Satellite**								**$4,140**
		logger/transmitter		Trancorp	Sat1		$3,000		used for in-kind services
		Enclosure		Trancorp	Std		$600		used for in-kind services
		battery		Trancorp	B100		$90		used for in-kind services
		solar panel and charge controller		Trancorp	S100		$250		used for in-kind services
		antenna		Trancorp	A100		$200		used for in-kind services
							$4,140		

Objective 6– Equipment Site List

A	B	C	D	E	F	G	H	I	J	K	L	M	N
Site Number	Principal Aquifer	Current monitoring frequency	Equipment purchase type	Equipment	Expected range of water-level depth	Expected transducer placement depth	Transducer base	Cable length (ft)	Transducer base cost	Cable cost (length x $5)	Base Cost/Federal funding	Telemetry base	Telemetry cost/in-kind services
HCOVA-1234 PT	Piedmont and Blue Ridge crystalline rock aquifers	Continuous	replace existing transducer	transducer /datalogger	105-140	150 ft	PT/DL base	150	$1,675.00	$750.00	**$2,425.00**	none	**$0.00**
HCOVA-5678 PT	Piedmont and Blue Ridge crystalline rock aquifers	Quarterly	upgrade quarterly site to continuous	Pressure transducer /datalogger	7-14 ft	20 ft	PT/DL base	20	$1,675.00	$100.00	**$1,775.00**	none	**$0.00**
HCOVA-2685 PT	Piedmont and Blue Ridge crystalline rock aquifers	Quarterly	upgrade quarterly site to continuous	Pressure transducer /datalogger	5-15 ft	20 ft	PT/DL base	20	$1,675.00	$100.00	**$1,775.00**	see below	**$0.00**
HCOVA-2685 cell telemetry			Add on cell telemetry	cell telemetry								Cell add on	**$1,000.00**
HC0VA-9101 PT	Northern Atlantic Coastal Plain	Annually	Upgrade to continuous	transducer /datalogger for satellite	30-45	50 ft	Base for Satellite	50	$1,075.00	$250.00	**$1,325.00**	see below	**$0.00**
HC0VA-9101 satellite telemetry			add on satellite telemetry	satellite telemetry								Satellite	**$4,140.00**

Objective 6– Detailed budget equipment costs

c) Equipment							
1)	2)	3)	4)	5)	6)	Source of funds	
						7)	8)
Description	Cost per unit	Number	Cost of equipment (c2 x c3)	cost (c4 x indirect rate)	Total cost (c4 + c5)	Federal	Agency in-kind
HCOVA-1234 PT	$2,425.00	1	$2,425.00	$242.50	$2,667.50	$2,667.50	$0.00
HCOVA-5678 PT	$1,775.00	1	$1,775.00	$177.50	$1,952.50	$1,952.50	$0.00
HCOVA-2685 PT	$1,775.00	1	$1,775.00	$177.50	$1,952.50	$1,952.50	$0.00
HCOVA-2685 cell telemetry	$1,000.00	1	$1,000.00	$100.00	$1,100.00	$0.00	$1,100.00
HCOVA-9101 PT	$1,325.00	1	$1,325.00	$132.50	$1,457.50	$1,457.50	$0.00
HCOVA-9101 satellite telemetry	$4,140.00	1	$4,140.00	$414.00	$4,554.00	$0.00	$4,554.00
		Totals	Direct cost total	Indirect total	Total cost	Federal total	Agency total
			$12,440.00	$1,244.00	$13,684.00	$8,030.00	$5,654.00

Match

- No match is required for Objectives 1 or 2
- For Objectives 3-6, You will get the highest score if you demonstrate at least 50% agency match FOR EACH OBJECTIVE (can be in-kind services)
- Include the match in your detailed budgets
- Include details on the match, not just a lump sum as match. Describe match tasks in the same way as you describe USGS funded work
- Get 1 point bonus for 25% match, 2 points for 33% match, and 3 points bonus for 50% match in the budget criteria

Budgets

- Use the format provided for the detailed budgets. These budgets contain the information we need to make decisions. If you leave any of this information out, it may affect the ranking of your proposal
- Proposals need: a budget summary for project, a detailed budget for each Objective applied for, and a SF-424 budget form. Make sure these budgets are consistent
- Include in-kind services in the detailed budget. List specific tasks
- Review new budget guidelines for contracts
- Proofread/check your budgets
- Make realistic budget estimates
- Budget templates now have some error checking

Contracts

- Need to provide specific costs for contract work
- Contract budgets should be similar to budgets for work proposed for your agency staff
- Cannot provide a lump sum for contract work
  - Will score lower in Budget category
  - This may delay your award
- Allow time in your objective timeline for establishing contracts
  - This always takes longer than expected.
  - We want to minimize requests for no-cost extensions.
  - These are often related to delays in the contracting process

Example detailed budget for contracted portion of work

e) Contracts- Salary							
1)	2)	3)	4)	5)	6)	Source of funds	
						7)	8)
Description of work	Hourly rate of compensation	Hourly rate of fringe benefit	Total hourly rate (e2 + e3)	Number of hours	Salary cost (e4 x e5)	Federal	Agency in-kind
Driller- Permits	$30.00	$10.00	$40.00	8	$320.00	$320.00	$0.00
Driller- Planning and Preparation	$30.00	$10.00	$40.00	16	$640.00	$0.00	$640.00
Driller- Well Development	$30.00	$10.00	$40.00	16	$640.00	$320.00	$320.00
Driller Assistant- Well Development	$30.00	$10.00	$40.00	16	$640.00	$0.00	$640.00
				Contracts- Salary Totals	Salary total	Federal total	Agency total
					$2,240.00	$640.00	$1,600.00

e) Contract- Supplies						
1)	2)	3)	4)	5)	Source of funds	
					6)	7)
Type	Unit Type (per foot or each)	Cost per unit	Number	Cost of supplies (b2 x b3)	Federal	Agency in-kind
PVC Casing	Per foot	$2.00	200	$400.00	$0.00	$400.00
PVC Screen	Per foot	$2.00	200	$400.00	$0.00	$400.00
Grout	Each	$50.00	2	$100.00	$0.00	$100.00
Sand Pack	Each	$50.00	2	$100.00	$0.00	$100.00
Cap and Protective Top	Each	$25.00	2	$50.00	$0.00	$50.00
			Contracts- Supplies Totals	Supplies Total	Federal total	Salary total
				$1,050.00	$0.00	$1,050.00

e) Contract- Travel										
1)	2)	3)	4)	5)	6)	7)	8)	9)	Source of funds	
									10)	11)
Traveler Name / Reason for travel	Number of days	Lodging cost per day	Meal cost per day	Meal and lodging ((d2 x d3) + (d2 x d4))	Miles traveled	Cost per mile	Mileage cost (d6 x d7)	Travel cost (d5 + d8)	Federal	Agency in-kind
Driller	6	$93.00	51	$864.00	500	$0.545	$272.50	$1,136.50	$0.00	$1,136.50
Driller Assistant	6	$93.00	51	$864.00	500	$0.545	$272.50	$1,136.50	$0.00	$1,136.50
							Contract- Travel Totals	Direct cost total	Federal total	Agency total
								$2,273.00	$0.00	$2,273.00

e) Contract- Well Drilling						
1)	2)	3)	4)	5)	Source of funds	
					6)	7)
Type	Unit Type (per foot or each)	Cost per unit	Number	Cost of supplies (b2 x b3)	Federal	Agency in-kind
Well Drilling (cost per foot)- Well 1	Per foot	$30.00	100	$3,000.00	$1,500.00	$1,500.00
Well Drilling (cost per foot)- Well 2	Per foot	$30.00	100	$3,000.00	$1,500.00	$1,500.00
Mobilization (2 wells)	Each	$1,000.00	2	$2,000.00	$0.00	$2,000.00
Site Cleanup (2 wells)	Each	$750.00	2	$1,500.00	$0.00	$1,500.00
Well Development waste disposal (2 wells)	Each	$500.00	2	$1,000.00	$0.00	$1,000.00
Contracts- Well Drilling Totals				**Supplies Total**	**Federal total**	**Salary total**
				$10,500.00	**$3,000.00**	**$7,500.00**

Proofreading your proposal

- Make sure you allow adequate time to review your proposal
- Basic proofreading is a must
- Shortcoming will result in a lower score in our new ‘Proposal Quality’ Criteria
- Have someone else review the proposal before submitting it
- Make sure to review your budgets carefully. We are going to be paying much closer attention to them during the proposal review process

Ideal proposal is ‘Simple and complete’

- We don’t need (or want) excessively long proposals
- We want the proposals to include the required information but to be as simple as possible
- Provide requested background information even if you have submitted previously
  - We have new members to the Program Board each year who need this background information
  - Returning Board members do not have access to previous proposals

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