



Groundwater Inventory, Monitoring and Management Technical Guide Charter

Date: December 1, 2011

To: Groundwater Inventory, Monitoring and Management Technical Guide Steering Team

From: Anne Zimmermann, Director – Watershed, Fish, Wildlife, Air and Rare Plants
Gary Schiff, Acting Director – Minerals and Geology Management

Cc: Christopher Carlson – WO; Joseph Gurrieri – WO/Golden

Executive Sponsor	Resource Staff Areas
Deputy Chief, NFS	WFWARP, MGM

Team Name	Project Name/Ref. No./Job Code	Scheduled Completion Date
Groundwater Inventory and Monitoring Technical Guide Team	IAGDEG	December 31, 2014

Charter to the Team

Technical guidance for inventory and monitoring groundwater resources on NFS lands and for managing those resources will be provided in the Groundwater Technical Guides. Technical Guides will incorporate methods and procedures adopted by the USGS, EPA, and other agencies for inventory, monitoring and assessment of groundwater resources. Technical and Field Guides developed as part of this effort will describe their use and application in a series of publications designed to support agency business needs.

Technical and Field Guides developed as part of this effort will reflect the latest methods and science for inventory, monitoring and assessment of groundwater resources. The Nature Conservancy has been a partner in the development of the groundwater-dependent ecosystem inventory protocols from their inception, and will continue to assist in this effort. Federal partners, including the NPS, BLM, EPA, and USGS, have been and will continue to be involved in and consulted during the development process.

The Groundwater Technical and Field Guides will be integrated with other relevant inventory protocols and Technical Guides. All protocols will comply with method validation, quality assurance, responsibilities, interagency coordination, and data management and storage requirements as specified in FSM 1940, the Inventory, Monitoring, and Assessment Improvement Strategy, and FSH 1909.14 (Draft).

Desired Characteristics of Protocols

The delivered protocols should be managerially relevant, financially feasible, and scientifically valid. For the purposes of this project, these characteristics are understood to mean the following:

- The protocol should not be overly complex or time consuming so that a forest level specialist cannot implement the protocol after completing a training session.
- The protocol should be cost effective.
- The protocol should have relevance to management and help in decision-making concerning groundwater-dependent resources.
- The protocol should conform to standard professional practice and be scientifically valid.

Purpose

An improved understanding of NFS groundwater resources and ecological systems dependent upon them is an essential part of sustainable and effective landscape planning and restoration. The ability to share information with conservation partners developed using consistent standards and methods will improve effectiveness. Land management planning, risk assessment, and restoration decisions cannot effectively address groundwater resources and the ecological, economic, and community consequences of different actions affecting groundwater resources without consistent methods for inventory, monitoring, and assessment. The Technical Guide to Managing Groundwater Resources revision will address land management planning, risk assessment, watershed restoration, and the ecological, economic and community consequences of different actions affecting groundwater resources. This Technical Guide is intended for Forest Service line officers and managers and will address management considerations.

Nationally consistent groundwater inventory and monitoring protocols have multiple benefits:

- It creates ability to generate GIS-based maps that display the spatial distribution of groundwater and groundwater-dependent ecosystems at watershed, Forest, and Regional scales.
- It provides managers with the ability to query databases for individual sites for pertinent resource information useful for making management decisions.
- It provides managers with information that facilitates the management of easements and special use permits related to groundwater by identifying facilities that need immediate maintenance to stop ongoing resource damage, or identifying environmental water requirements.
- It improves the ability to make decisions about future water uses and allocations because it helps provide for a more comprehensive picture of water movement, linkages, and resource impacts and conditions at multiple scales.

Information Resource Direction Board (IRDB) Expectations

The protocol development team will:

- Develop a project plan.
- Generate reports from meetings.
- Complete a technical guidance document for Groundwater Inventory and Monitoring.
- Develop and field test prototypes for training and cost estimation/control.
- Draft implementation plans and submit to appropriate directors for commitment to long-term support for the protocol, field use, quality assurance, and integration with appropriate agency information systems and directives.
- Work with NRM to identify and implement changes in data standards, definitions, and user interfaces.
- Update appropriate directives.

Scope Statement

This project is to support work directly related to Land Management Planning as well as project-level work such as the monitoring or planning of individual projects. The scope of this charter covers project work planning, draft protocol development, protocol testing, development of a technical guidance document, and training materials. Pre-planning to identify data repository

requirements and a change management system is within the scope of this charter. Actual development of those program support elements is outside the scope of this effort.

Project Team Organization

Within the Forest Service there are a limited number of technical experts in the field of hydrogeology and groundwater resources. Representatives from other disciplines and fields and agency partners must be engaged in the development of the groundwater inventory and monitoring Technical Guides.

Membership in various teams or groups is designed to foster representation of the breadth of expertise and perspectives in the agency and partner organizations and to encourage efficient operations by managing time commitments required of participants.

The Sponsor's Representatives will work with the National Program Leader, the Project Manager, and potential participants to establish the membership in each of the teams.

The *Steering Team* provides management oversight and policy review of products being developed. The steering team should include the following: a Regional Director; a Forest Supervisor or Deputy Forest Supervisor; a Regional ecologist, hydrologist or biologist; a National or Regional planner or NEPA specialist; and a Regional inventory and monitoring program leader. The National Groundwater Program Leader will serve as steering team leader and will keep the Washington Office lead Directors informed of overall progress, policy issues, and coordination needs. Representatives on the steering team will provide updates on progress and issue resolution to their respective communities of interest/practice.

The *Core Team* will be comprised of members of FS field and WO staffs, and partner organizations, and is designed to represent the expertise and perspectives in the agency and partner organizations and to encourage efficient operations by managing time commitments required of participants. The Core Team will ensure that the Steering Team is updated regularly and that work products are reviewed by national program managers and staff members as appropriate. Regional and Station representatives on the Core Team will ensure reviews are obtained from Regional and Station level staffs and other levels as appropriate. Representatives from partner organizations will similarly ensure reviews by their respective organizations. The Project Manager will be the Core Team leader.

The **Core Team Leader** is responsible for accomplishment of the project objectives. Additional responsibilities include: meeting management, facilitating agreements with core team members on task assignments, project scheduling, and monitoring. The Core Team Leader will participate in Steering Team meetings to provide updates on progress and bring forward issues and recommendations identified by the Core Team.

The Core Team may charter **Technical Working Groups** to address specific issues, develop recommendations, and draft technical guide materials. Members of these Working Groups will be drawn from various sources, including Regions and WO Technical Centers. Technical specialists from conservation partners will participate on technical working groups, as appropriate. Technical Working Groups should have at least one member from the Core Team. The Technical Working Groups will coordinate through, as well as provide updates and reports to, the Core Team.

EMC staff will provide project support for web services, contract administration, financial management, and administrative support.

Office of the General Counsel Advisor – Attorney Advisors from the Office of the General Counsel will assist the Core Team in developing business requirements. Those requirements that stem from common issues involved in litigation associated with groundwater uses and protection will be identified to ensure recommended methods are responsive to these issues.

Delegation of Responsibility and Authority

Chris Carlson and Joe Gurrieri are designated as the Project Managers for the groundwater inventory and monitoring protocol development project and are authorized to ensure Technical and Field Guides meet expectations described here. They are responsible for internal communication among project team members and for cooperation with responsible Resource staff and other Forest Service business areas.

Responsibility

The project managers will—

- Be the primary point of contact for the NFS Resource Information Portfolio Manager and resource staff areas.
- Ensure that team members know their responsibilities.
- Identify key stakeholders and plan an appropriate communication strategy.
- Track team member performance.
- Track overall project performance.
- Prepare a detailed project plan, and get agreement to that plan from the Executive Sponsor or Executive Sponsor's representatives.
- Maintain a project record with all project correspondence.
- Report project status to Executive Sponsor and Executive Sponsor's representatives quarterly.

Authority

The project managers authority includes—

- Authority to direct the project team.
- Access to Executive Sponsor on all matters related to this effort.
- Access to the Executive Sponsor's representatives on all matters related to this effort.
- Control of the project budget.
- Access to financial reports related to project expenditures, including time and attendance.
- Renegotiation with the supervisors of core team and working group members to delegate responsibility and authority of core team and working group members.

Team Budget / Resources

Core Team and Working Group members' participation will be approved in writing by their supervisors prior to working on this project.

The project team's budget and resources (pending annual review and approval) include—

\$64,000 for FY 12
\$63,000 for FY 13
\$116,500 for FY 14
\$131,500 for FY 15

Authorizing Signatures

Name: James McQuinn Date: 12/16/2011
 Title: Deputy Chief, National Forest System

Through -
 Name: Chris J. Zimmerman Date: 12/13/11
 Title: Director, Watershed/Fish/Wildlife/Air/Rare Plants

Name: Sam Schiff Date: 12/13/11
 Title: Director, Minerals and Geology Management

Prepared By (print)	Date Prepared	Preparer's Initials
Joe Gurrieri and Chris Carlson	12/1/11	jg/cpc