

***Ground Water Inventory, Monitoring & Assessment***

***Technical Guide Development***

**Date:** 6/21/12 (Final)

**Subject:** Steering Team Conference Call

**Participants:** Leslie Bach, Barry Burkhardt, Chris Carlson, Tony Crump, Joe Gurrieri, Linda Spencer, Steve Solem

**Unable to Participate:** John Allen, Tony Erba, Katherine Smith

**Discussion Topics and Action Items**

**Next Steering Team Call on September 27 @ 3:00 EDT/1:00 MST**

1. **Project Overview**

**Steve Solem reviewed the current project schedule with the group. The main “event” within the project schedule is revision of the Technical Guide based on comments from the Core Team that will be discussed later in the call. These revisions another potential review by the Core Team set the stage for completing the draft Technical Guide that will undergo technical review in early October.**

**Work on Environmental Flows and Levels and Remote Sensing are depicted as separate task groups on the updated schedule. Information from these two areas will be integrated with the rest of the Technical Guide prior to the Technical Review in October.**

1. **Groundwater Inventory, Monitoring and Assessment Technical Guide**

**Steve Solem led the discussion of the following items related to the GW IM&A Technical Guide:**

**Core Team Comment Summary/Proposed Reconciliation – Core Team comments on all sections were evaluated and resulted in the identification of eight substantive comments that were discussed by the Core Team. The attached comment summary and reconciliation document the details the Core Team’s proposed reconciliation of substantive comments.**

**The Core Team is reviewing other editorial suggestions and comments provided during the review to identify any changes that individual Core Team members feel should not be made. If there are no objections, the editing team will proceed with making the changes.**

**The Steering Team reviewed the Core Team’s recommended changes and agreed with the recommendations as noted in the attachment.**

**Document Outline – The purpose of the TG is to describe groundwater inventory, monitoring, and assessment concepts and methods and how they support agency planning and decision making. As discussed on the last Steering Team call, the current document outline needs revision. Steve Solem provided an overview of a proposed outline showing where different sections of the current version of the Technical Guide (v2.0) and the supporting Technical Notes might fit within that structure.**

**The general flow of each section in the Technical Guide would be:**

**Introduction 🡪Planning and Design 🡪Methods🡪Data Products and Application/Use**

**Following this pattern in the proposed Technical Guide outline, the primary issues by section include:**

1. **Introduction – this section is in pretty good shape, with the exception of 1.4 – Key Concepts, which should describe the relationship of methods described in the Technical Guide with agency decision making and administration.**
2. **GDE Inventory and Monitoring – this section is in pretty good shape for inventory. Work on the GDE Inventory Field Guides deliberately focused on inventory, with few references to monitoring. Level II can be designed to serve as a basis for monitoring some aspects of GDEs associated with project activities (e.g., the Montanore Mine case study). Environmental Flows and Levels could also be characterized as a monitoring component. At this time there is lots of information on groundwater monitoring presented in the Technical guide, but virtually nothing on GDE monitoring.**
3. **GW Inventory – Currently this section has some analysis/assessment information included that could move to the new Section on Analysis/Assessment.**
4. **GW Monitoring – This section is in pretty good shape, just minor reorganization of the content.**
5. **GW/GDE Analysis/Assessment – Content from the GW inventory section will flesh this out, but there is little to no information on GDEs.**

**Several Steering Team members had suggestions regarding the proposed outline but were supportive of the overall concept. Specifically the following points were raised:**

* **Section 2 – GDE Inventory and Monitoring appears out of sequence and should follow the GW Inventory and GW Monitoring sections. GDE inventory relies upon information developed in those sections.**
* **Sections 3 – GW Inventory and Section 4 – GW Monitoring should include data analysis and evaluation. Putting this information “closer” to the discussion on data collection provides readers/users with a more direct connection between collection and analysis processes. This change will also provide the ability to address temporal aspects of re-measurement and monitoring trends over time.**

**This would revise the pattern of discussion to include “data analysis and evaluation” in the same subsection as “application and use of data products” (subsection x.4).**

* **Section 5 – GW/GDE Analysis and Assessment – This section should focus on how groundwater data are used in different assessments and their connections to land management and project planning and project implementation/administration. Work on FS directives for the new planning rule may have some implications on the content of this section.**

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| **Action:** | * **Steering Team members should provide Chris, Joe and Steve any suggestions and comments on the proposed outline by July 20.** |

**Technical Review Group Status – Joe is actively working on recruitment and securing technical reviewers. A progress report will be sent to the Steering Team once Joe has finalized agreements with reviewers.**

**Steve stressed that we still need to make sure our list of partners/affiliate reviewers is complete. All partner and affiliate reviewers will be provided an opportunity to comment on the draft.**

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| **Action:** | * **Joe will send the Steering Team a roster for the technical review.** * **Steering Team members should provide suggestions for reviewers to Joe and Steve.** |

1. **Environmental Flows/Levels Pilot Test Update**

Joe Gurrieri provided the following overview of the pilot tests:

**Sheyenne NG/North Dakota –** The Sheyenne National Grassland has been selected for the first Phase II pilot site, starting in April 2012. It provides a unique set of circumstances for testing the EF/L framework and analysis methods. The issue being examined is the effect of a cone of depression from agricultural ditches on inter-dunal wetlands within the NG and possibly on nearby TNC preserves. The management goal of this project is as follows:

*How can drainage ditches in the Sheyenne Delta be better managed to meet the goals of agriculture while still supporting an acceptable number of groundwater dependent wetlands and species? Specifically, how can the extent, locations, placement, and management of ditches be designed and maintained to enable them to function more like natural drainages across the landscape?*

Oregon Dunes NRA/Oregon – The Oregon Dunes NRA within the Siuslaw NF in Oregon is the second pilot test. Community water rights/wells and their effects on inter-dunal wetlands within the ODNRA are the focus of the pilot. This effort is just getting started compiling background data and study design.

1. **Groundwater Dependent Ecosystems Inventory**

**Joe Gurrieri and Steve Solem provided the Steering Team with an update on:**

**Inventory Field Guide Publication Status – Both Level I and Level II Inventory Field Guides have been published and are available at:**

[http://www.fs.fed.us/geology/groundwater.html](http://www.fs.fed.us/geology/groundwater.html" \t "_blank)

[http://www.fs.fed.us/biology/resources/pubs/watershed/index.html](http://www.fs.fed.us/biology/resources/pubs/watershed/index.html" \t "_blank)

**All Technical and Field Guides are also posted on the EMC – Resource Information page. There is a placeholder for the Level I and II Field guides and database on this page. These links will be active shortly at:** <http://www.fs.fed.us/emc/rig/protocols/master.shtml>

**The GDE database and portable data recorder application are also available for use. These applications will also be posted on the M&G/WWFARP and EMC websites. In the meantime, contact Joe if you need them.**

**GDE Training and Implementation Support – Joe has been working with the National Minerals Training Office and has developed a one-hour training webinar on GDE inventory. The webinar was used as part of a “train-the-trainer” session in Region 4 last week that also includes a three-day field session. Following this session, the webinar will be available for use in other Regions.**