Peer Review Plan

Date: 4/20/2011

Source Center: U.S Geological Survey (USGS)
Oregon Water Science Center
2130 SW 5th Ave
Portland, OR 97201

Title: Coupled Groundwater Flow and Management Models for the Upper Klamath Basin, Oregon and California.

Subject and Purpose: This report describes the development of a model that simulates regional groundwater flow in the upper Klamath Basin in Oregon and California, including theory, underlying conceptual framework, and supporting data (herein referred to as the Simulation Model). It also describes a groundwater management model coupled to the Simulation Model that employs methods of constrained optimization to evaluate groundwater management options given defined objectives, decision variables, and constraints (herein referred to as the Management Model).

The coupled Simulation and Management Models are intended to provide insight into how the regional groundwater and surface-water systems will respond to changes in groundwater use, climate variability, and other external stresses. More importantly, the models provide a tool with which resource managers can determine optimal resource management strategies to maximize the efficient use of the resource while avoiding undesired impacts.

The models documented in this publication satisfy the need identified in the Klamath Basin Restoration Agreement for a tool that can be used to evaluate impacts to streams from groundwater pumping. There is considerable interest in the Management Model by water users because it will provide information on sustainable groundwater pumping rates. This is the first tool available with which to evaluate the impacts of groundwater pumping on streams in the Klamath Basin. The publication will be released as a USGS Scientific Investigations Report.

Impact of Dissemination: This product is considered by the USGS to be Influential Scientific Information.

Timing of Review: April–May 2011. Deferrals are not anticipated at this time.

Manner of Review, Selection of Reviewers, and Nomination Process: Review will be by individual letters. USGS will select the peer reviewers pursuant to requirements in Survey Manual chapter 502.3—Fundamental Science Practices: Peer Review (*http://www.usgs.gov/usgs-manual/500/502-3.html*).

Expected Number of Reviewers: Two peer reviewers.

Requisite Expertise: Geology, groundwater hydrology, groundwater modeling, basic groundwater management issues.

Opportunity for Public Comment: None. The opportunity for public comment is not formally incorporated for this product.

Agency Contact: peer_review_agenda@usgs.gov.