

## Groundwater Modeling Training

### Phase 1 Storyboard (30 Mar-3 April 2015)



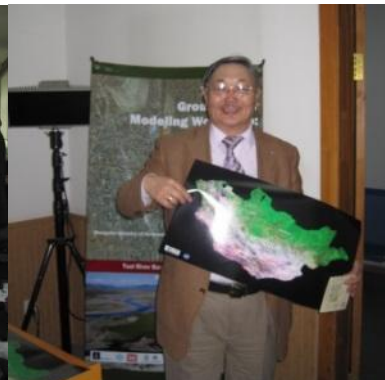
Purpose: To deliver a groundwater modeling and monitoring training workshop on groundwater principles; aquifer characterization; and data acquisition needed to design, construct, and use groundwater models with case study application for the Tuul River Basin in Mongolia and to present the interim model products to decision-makers for consideration in future water-related planning activities.

#### Highlights

1. Delivered training on groundwater principles and modeling to 37 professional hydrogeologists and hydrologists.
2. Conducted exercises with USGS-supported groundwater modeling software--Model Muse and MODFLOW, including data import from GIS.
3. Provided preliminary Tuul River Basin MODFLOW model framework and development plan.

#### Way Forward

- Refine the Tuul River Basin MODFLOW groundwater model and integrate results into the Tuul River Basin IWRM/SVP decision model for water security planning.
- Next workshop in September 2015 on Tuul River Basin model refinement and use in decision-making.
- MEGDT requested subsequent training on the application of groundwater modeling in the Gobi Region, including use of geophysics for estimating aquifer storage change.



37 participants learn groundwater modeling using MODFLOW software

Dr. Batsuk receives a Modis satellite image of Mongolia

Ms. Carter, USGS, presents on groundwater modeling techniques

Strengthened cooperation with MEGDT, FWI, USGS, and USACE