

**Priority Goal #1: Achieve and maintain sustainable balance of groundwater withdrawals with annual recharge in the Equus Beds Aquifer by 2020. Ensure safe yield and recharge rate calculations in the Equus Beds Aquifer are accurate through a district wide integrated groundwater and surface water model by 2018.**

Initial efforts will be focused on developing a refined understanding of the current balance of groundwater appropriations and sustainable yield. Subsequent efforts will focus future management strategies on achieving a long term balance between withdrawals and recharge.

### **Action Steps**

- ❖ Complete ongoing KGS modeling effort currently scheduled for completion during 2016.
- ❖ Utilize the model results to support refinement of aquifer recharge rates.
- ❖ Consider application of the revised recharge rates to support safe yield calculations within modeled boundaries.
- ❖ Complete expansion of existing USGS Equus Beds MODFLOW Model to cover all of GMD2.
- ❖ Continue to encourage communication and collaboration between all responsible agencies and organizations tasked to implement this action.
- ❖ Utilize modeling results to inventory areas of over-appropriation or within the Equus Beds Aquifer.
- ❖ Consider implementation of management strategies for over-appropriated areas identified by model within the Equus-Walnut Region.

### **Agencies/Organizations**

- ❖ GMD2, DWR, KWO, KGS, Equus Beds Stakeholders and Stakeholder Organizations.

### **Resources needed**

- ❖ Continuation of joint funding agreement between GMD2 and KWO.

### **Timeframe:**

- ❖ The timeframe for completion of the actions required to support this goal are outlined in the attached document. The actions are generally anticipated to be completed by the end of 2018

### **Geographic Scope:**

- ❖ The action items identified generally cover the majority of the Equus Beds Aquifer. The modeling activities will help define the most vulnerable areas within the aquifer and facilitate prioritization of areas for safe yield adjustments.

### **Regulation/Policy Changes:**

- ❖ Consider adjustment of GMD2 and DWR safe yield calculation criteria to reduce potential future over appropriation. Develop resource management strategies focused on achieving a long term balance between withdrawals and recharge.