

WATER TASK FORCE

DATA NEEDS SUB-COMMITTEE

10-Feb-03

The Data Needs sub-committee met on February 5 in Grand Island. Paul Currier and John Turnbull, Water Task Force members, Duane Woodward - Central Platte Engineering Hydrologist, and Rich Kern - Department of Natural Resources Engineer were present. The following table lists the information, data, maps necessary to conduct two levels of study and then the management of an integrated water management area. **The list is not intended to be all inclusive.**

As amended by the Water Task Force Executive Committee on Feb 10, 2003

DATA	RECONNAISSANCE LEVEL STUDY	DETAILED GROUNDWATER AND SURFACE WATER STUDIES	MANAGEMENT AND REGULATION
EXISTING RECORDS, DATA, AND MAPS			
Stream flow historic records	X	X	
Stream base flow historic records	X	X	
Surface water use			
Surface water use by individual appropriators	X	X	
Reservoir storage historic records	X	X	
Surface water delivery to farms (Irrigation districts)	X	X	X
Canal historic and current diversions and return flows	X	X	X
Canal seepage losses		X	X
Ground water data			
Ground water levels historic records	X	X	X
Well hydrographs	X	X	X
Ground water table historic maps	X	X	X
Ground water pumpage records			
Municipal water use	X	X	X
Industrial water use	X	X	X
Agriculture use	X	X	X
Climate records	X	X	X
Land Use			
Crops		X	X
Pasture and range		X	X
Conservation practices	X		
Irrigated acres - historic and current			
Surface water irrigated acres - detailed inventory - air photos, etc.	X		
Ground water irrigated acres - detailed inventory - air photos, etc.		X	
Surface water rights by tract of land - DNR approved rights		X	
Ground water irrigated acres by tract of land - certified by NRD			X
Well locations			X
Population		X	X
Physiographic region maps		X	
Topographic maps - land elevation and contours		X	
Soils		X	

DATA	RECONNAISSANCE LEVEL STUDY	DETAILED GROUNDWATER AND SURFACE WATER STUDIES	MANAGEMENT AND REGULATION
Geology			
Test hole records (Conservation and Survey Division)		X	
Test hole records (Well drillers)		X	
Irrigation well drilling logs		X	
Thickness of aquifer		X	
Horizontal extent of aquifer		X	
Top of aquifer		X	
Base of aquifer		X	
Transmissivity		X	
Storage coefficient		X	
Pump test data		X	
Wetland and wetland hydrology inventory	X	X	
Instream flow rights	X	X	X
Habitat flow needs	X	X	
COMPUTER MODELING, PROJECTIONS, AND INFORMATION FOR POLICY DECISIONS			
Develop Ground water and precipitation historic changes graphs	X		
Develop Surface water and precipitation historic change graphs	X		
Conduct research to fill in data gaps		X	
Computed Recharge data		X	
Compile low stream flow data		X	
Develop Ground water and surface water computer model		X	
Develop water supply projections		X	
Social - Economic issues		X	X
IF INTEGRATED MANAGEMENT PLAN IS IMPLEMENTED			
Monitor trends			
Precipitation			X
Ground water levels			X
Stream flows			X
Reservoir storage			X
Irrigation water use			X
Municipal water use			X
Industrial water use			X
Land use changes			X
Population			X
Wetlands that are connected to ground water table			X