Minnesota Department of Natural Resources

Water Appropriations Permit Program



Julie Ekman, Water Regulations Division of Ecological & Water Resources

Goal for Managing Water Resources

Sustainable water resource management that balances competing objectives including economic development, recreational use, and protection of Minnesota's water resources

DNR's Water Appropriation Program

- >10,000 gpd or 1,000,000 gpy
- Appropriation of 'Waters of the State'
- Balance competing objectives
 - Economic development
 - Natural resources protection
 - Recreational use

Riparian Doctrine

Basis in English common law doctrine of riparian rights modified by reasonable use concept



Water Allocation Priorities



Domestic water supply



Consumptive <than 10,000 gallons/day



Agricultural irrigation & processing

7	1



Power production



Consumptive uses >10,000 gallons/day



Non-essential uses

Where do we get our water?



groundwater

Groundwater Availability Varies





Non-Consumptive: Power Generation used 916 BG

Annual Water Use Trends



Water Supply Planning

- Public water suppliers serving >1,000
- Plans are updated on a 10-year cycle

- Water Supply Plans address:
 - Conservation measures
 - Future water supply sources and infrastructure
 - Emergency procedures and interconnections
 - Impact on natural resources and monitoring

Water Use Permitting

Current and Emerging Challenges

- Changes in climate
- Increasing demands on limited resources
- Land use changes
- Surface water impacts
- Demand for improved permitting efficiencies

Current & Emerging Challenges Climate Change







Current & Emerging Challenges

Irrigation Permits Major Crop- Non-Crop - Wild Rice

Public Water Supply Permits Proximity to Trout Streams & Calcareous Fens





Current & Emerging Challenges Surface Water Impacts



Current & Emerging Challenges Demands for Permitting Efficiencies

- January 2011: Governor's Executive Order 11-04
 Issue permits more efficiently
- March 2011: MN Session Law Chapter 4 HF #1
 - Make permitting application process more efficient
- April 2011: DNR's Permits Transformation Task Force
 - Identified options to improve natural resource outcomes associated with permitting programs

MPARS- Minnesota DNR Permitting and Reporting System





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Vision for the Future

Drought Challenges

- Emergency fire protection
- Natural resource protection
- Infrastructure requirements
- Inability to pump
- Water quality concerns
- Adverse impacts to the aquifer
- Well interferences
- Water use conflict

Water Use in Minnesota

- Annual reporting of monthly water use & metering to 10% accuracy
- Public water suppliers serve >1,000
- Required to have water supply plans (WSPs)
- WSPs need to address drought contingency planning
- DNR staff also work with small community suppliers

Drought Plan Matrix - Handout

Drought Phases	State & Federal Actions	Water User & Supplier Actions
Non-drought phase	Monitor GW, SW, precip & quality	WSPs, alternate supplies, efficiency
Watch phase	Inform Drought Task Force (DTF), public awareness, monitoring	Monitor potential conflicts, share conservation info & request voluntary action
Warning phase	Convene DTF, notify water suppliers, increase public awareness, MI R. low flow	Implement water use restrictions, conserve, 50% above Jan., MI R. plan
Restrictive phase	Notify water suppliers, focus on river flows, cont. drought awareness	Allocation restrictions, 25% above Jan., conserve, minimize non-essential use
Emergency phase	Advise Governor, implement Emergency Plan, engage USACE	Mandatory water use restrictions, Jan. levels, follow M.S. priorities, alternate water sources

Drought Task Force

Includes members from

- State agencies
- University
- Federal partners
- Local government
- Business sector

Convened April, August & October 2012

Previously convened in 2006 & 2007