Letting It All Soak In: Nature’s Role in Protecting Water Resources

Some Chicago Wilderness Region Case Examples

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Water resource conscious-growth will insure more sustainable water quality and quantity, healthier ecosystems, lower costs, and better air quality, to name a few benefits.  Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan, Chicago Metropolitan Agency for Planning.

- Runoff versus Resource?
- Is Infiltration Always Better?
- Creatures vs people or canary in the coal mine?
Groundwater, Nature, and People: Some Case Studies

- Romeoville, Lockport Prairie, and the Hine’s emerald dragonfly
- Stearns Road environmental corridor
- I-355, Blackberry Creek, and the Hine’s emerald dragonfly
- Bluff Spring Fen and gravel mining
- Carrington Reserve
- Harvest Bible Chapel
Romeoville, Lockport Prairie, and the Hine’s emerald dragonfly

- HED relies upon shallow dolomite aquifer – Dom will cover studies of this in Will County
- Communities may also rely on shallow dolomite aquifer for potable water
- Romeoville blends from deeper sandstone wells and shallow dolomite wells, treats for radium, and has embraced the HED as a symbol of needed water stewardship
Stearns Road Environmental Corridor

- Groundwater study to identify recharge areas
- South Elgin recharge ordinance
- Fen protection and enhancement
- Separation of road runoff from groundwater systems
- Used road project to facilitate protection and management natural resources in vicinity
**I-355, Black Partridge Creek and the HED**

- ISWS study showed up to 30% of infiltrated water for Black Partridge Creek would be lost due to roadway project. Realigned roadway and separated road runoff – putting dirty water into ground does not make it groundwater.

- Then HED discovery – also dependant on groundwater – again diverted all road runoff away from HED habitat. Experimented with creating new habitat by harnessing groundwater discharges.
Harvest Bible Chapel, Elgin

BMPs, Retrofits, adjacent to Tyler Creek and fen
Bluff Spring Fen and gravel mining

- Bluff Spring Fen is one of our region’s crown jewels – a large wetland system dependant on groundwater.
- But next to large quarrying operation that is now engaged in underground mining of deeper layers.
- Fen Protection Plan
  - Monitoring and groundwater model
  - Diverting surface runoff from offsite sources
  - Putting water back into ground from quarry pit
Carrington Reserve
We want to see less of this...
QUESTIONS

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