Perspectives and Policy Issues on Indirect Reuse

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Terminology: Direct Reuse

- Treated wastewater effluent is transported directly from the WWTP via pipeline or similar conveyance for subsequent use.
- Clearly authorized under Texas law unless expressly limited in the water right.
Treated wastewater effluent first discharged into a watercourse and transported via the “bed and banks” of a watercourse for subsequent diversion and use.
Texas Population Growth Estimates (2000-2060)

Texas Water Demand Projections (2000-2060)

Regional Plans

- Reuse included in 14 Regional Plans
- 1.3 million acre-feet by 2060
- 72% of this is for “indirect” reuse, 28% is for “direct” reuse

Pending applications for indirect reuse seek about 1.6maf/y across the state – nearly all are contested
Issue 1 - Is it a New Appropriation or Something Else?

Statutory Conflict

Is it “surplus water” available for appropriation by others?
(Water Code § 11.046)

or

Is it “water” for which you can get a “bed and banks permit”?
(Water Code § 11.042)

Impacts

Who pays?
Timing and nature of infrastructure investments?
Issue 2 – Does the Source of Effluent Matter?

Groundwater

Imported Surface Water

In-basin Surface Water
Colorado – once discharged, it is part of the stream (*Ft. Morgan Reservoir & Irr. Co v. McCune*, 206 P. 393 (Colo. 1922); *Pulaski Irr. Ditch Co. v. City of Trinidad*, 203 P. 681 (Colo. 1922))

Montana – no right once water is beyond direct control (*Rock Creek Ditch & Flume Co. v. Miller*, 17 P.2d 1074 (Mont. 1932)).


New Mexico – “once the effluent actually reaches a watercourse or underground reservoir the [discharger] has lost control over the water and cannot recapture it.” (*Reynolds v. City of Roswell*, 654 P.2d 537 (N.M. 1982))
Other States – Imported Water

  
  – the right of re-use, successive use, and disposition after use of the imported water
  
  – included the right to sell to downstream irrigators after discharge
  
  – Express statutory treatment for “foreign water … from an unconnected stream system”
Issue 3 – Are Historic and Future Return Flows Treated Differently?

• Do we honor past permitting decisions (return flows assumptions of actual or future levels of return flows)?
• Do we protect the reliability of water rights enjoyed because of return flows?
Issue 4 – Who Can Get Reuse Rights?

Underlying water right holders?

or

Purchasers of raw water?

or

The Dischargers?

or

Anyone?
Recent Utah Legislation

- Direct reuse –
  - municipal water rights
  - takes priority date of the underlying right
  - controlled by a public entity; a governmental entity can contract to establish requisite control of POTW
  - consistent with the underlying water right (consent of underlying water supplier required)
  - downstream water rights can be protected
- Use of discharged effluent
  - permitted through the normal appropriations process

Other states

- California – local sanitation districts can sell effluent but limited to areas served by other water suppliers (Cal. Code Reg. Titles 17 & 22; Cal. Water Code § 13550)

- Nevada – through normal appropriation system, WWTP gets the initial water right (Nev. Rev. Stat. § 533.440)

- Washington – right goes to WWTP but it must get agreement and compensate or mitigation impairment to existing downstream rights (Rev. Code Wash. Ch. 90.46)
Issue 5 – What About Environmental Flows?

- Return flows are a recognized and significant source of environmental flows
- Do we sustain artificially created habitats and flow regimes?

What does the environment really need?
At times, return flows may account for a significant percent of the flow in the river.
What Next?

- Potential Legislative Action
  - Agency Recommendations
  - Regional Planning Group Requests
  - Interim legislative hearings
- Pending Disputes
  - Litigation or Settlement?
- TWCA Reuse Committee
Acknowledgments

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- LCRA Staff