County Of Maui v. Hawaii Wildlife Fund Questions & Implications for States: Colorado's Perspective

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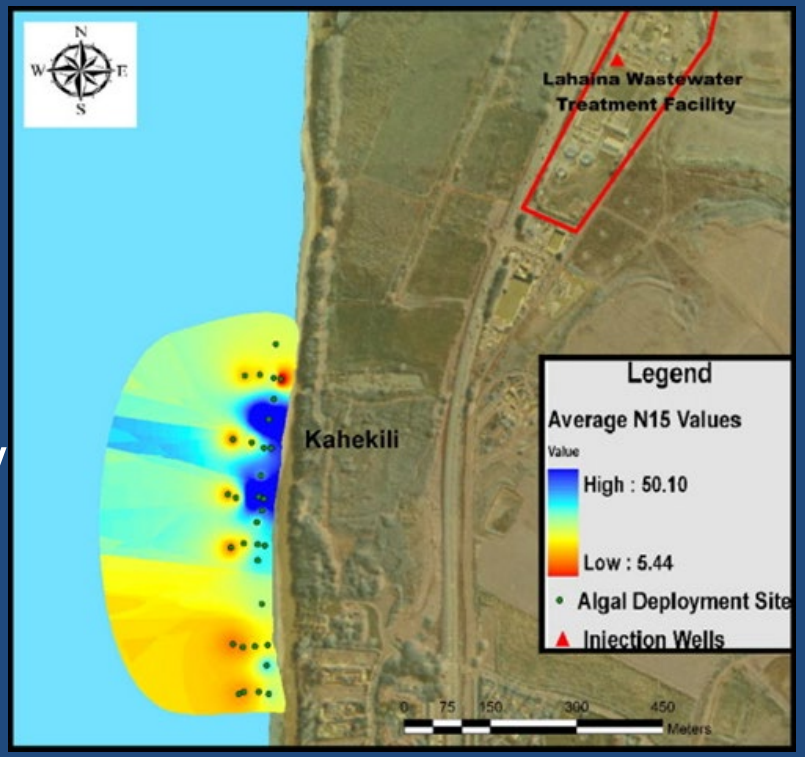
Hawaii Wildlife Fund v. County of Maui

- "We hold that the statute requires a permit when there is a direct discharge from a point source into navigable waters or when there is the functional equivalent of a direct discharge."
- Colorado's program has historically taken into consideration many of the factors outlined in the *Maui* decision to determine whether to treat discharges to groundwater as discharges to surface water



Maui 2021 EPA Guidance

- Colorado's view: the Guidance tries to inappropriately narrow the *Maui* decision
- Does not seem to reflect any of the permits of hydrologically connected groundwater, including those written by EPA and states like Colorado
  - **Example:** Narrows "functional equivalent" to mean that a discharge via groundwater should have the "**same or nearly the same chemical concentration**" as a direct surface water discharge
  - **Reality:** There is likely to always be at least a small amount of in-ground treatment and dilution.
    - TSS, BOD
- Puts the onus of proving a discharge is occurring on the state or EPA


Colorado's Program

Why is permitting discharges to hydrologically connected groundwater as surface water discharges important to Colorado?

1. **To reflect the actual receiving water**
   - The Clean Water Act/WQCA is all about protecting the USES of that water from discharges of pollution - so our permits need to reflect where the discharge is actually going
2. **To ensure the discharge does not compromise surface water only uses like recreation and aquatic life**
   - 5 CCR 1002-61, Reg. 61.8(1) – WQCD can only issue discharge permits when the conditions will ensure compliance with the receiving water's standards
   - Examples - Aquatic life and metals
3. **To protect surface water with technology-based limits (ELGs)**


Nuts and Bolts

Some Criteria That Has Been Applied by WQCD to Assess Hydrologic Connection

- Intentionally includes only those most clearly connected
- Is there an augmentation plan or other water rights agreement with an approved augmentation to surface water via the groundwater discharge?
- Is any part of the discharge located within the distances below to the surface water's channel?
  - If it is a high energy or small stream, is the discharge within 200 feet of the side of the stream channel?
  - If it is lower energy stream or larger river, is the discharge within the alluvium? (assumed to be 500 feet or less)
- If the discharge is a well, has the Division of Water Resources, Department of Natural Resources found that the well discharges to the alluvium?

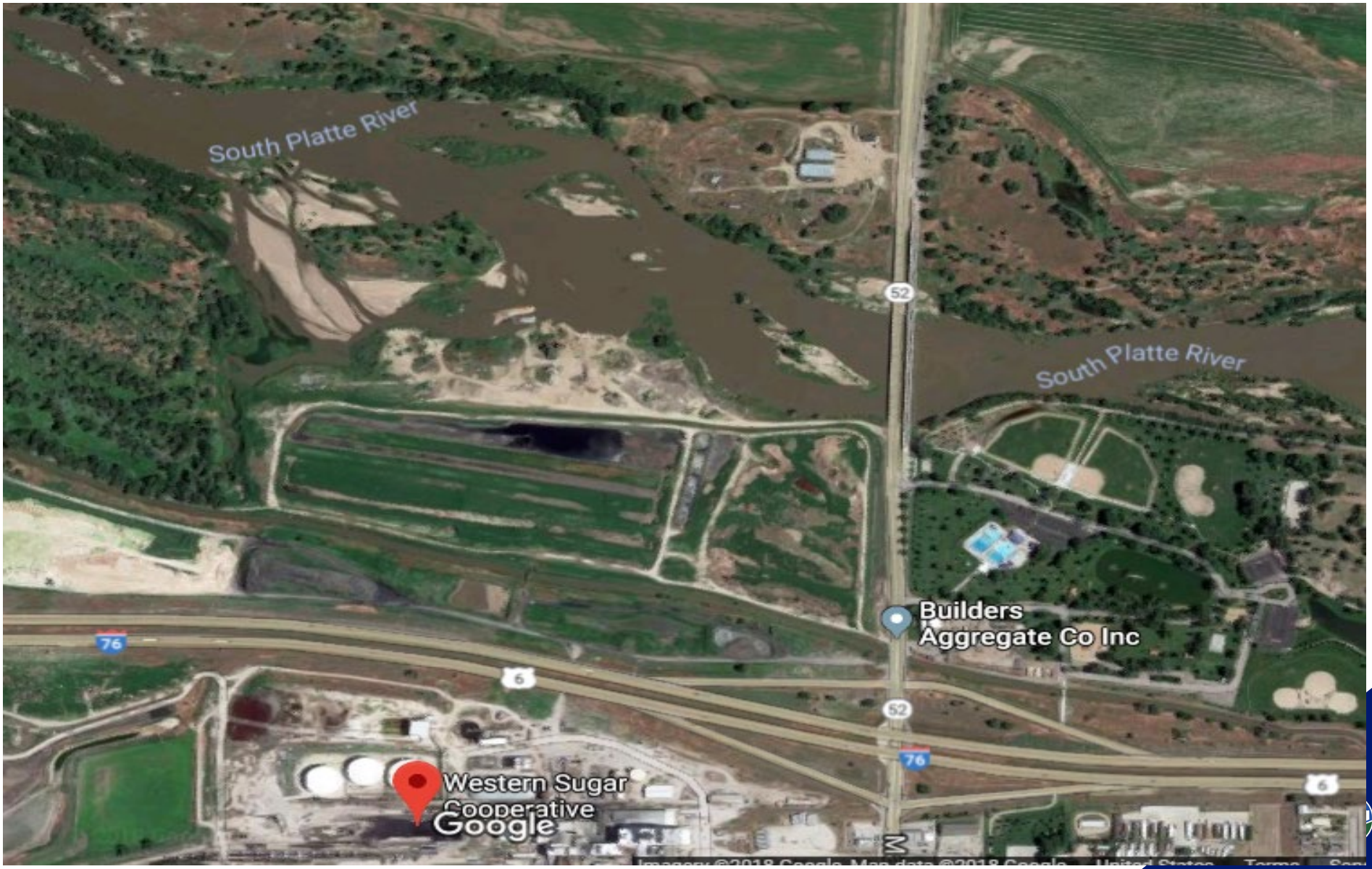
Examples

Examples of existing Colorado NPDES permits regulating hydrologically connected groundwater

- Hard rock mining
  - Generally discharges to ponds located in alluvial channel.
  - Example - denial of request to terminate a surface water permit in 2017 at Ouray Silver Mine when pipe was moved.
- Industrial discharges - started 2009
  - Western Sugar: discharge ponds historically built in the alluvium.
- 6 domestic discharges, more to come

Purpose: to catch directly connected surface water discharges and permit them correctly to protect beneficial uses

Industrial Discharge Example - Western Sugar in Fort Morgan, C00041351



Western Sugar - Example of How Colorado Has Made Determinations

- The permit was renewed in December 2005 as a GW permit but included a compliance schedule for the performance of a hydrological connection study due to the proximity of the unlined ponds to the South Platte River.
- In August 2007, Western Sugar submitted the hydrologic connection study.
- In October 2008 WQCD noticed a draft modification to the permit, and in January 2009 WQCD issued a permit modification to change the discharge to a surface water permit based the proximity of the ponds to the South Platte River, and the shallow depth to the alluvial water beneath the site.

Western Sugar - Example of How Determinations are Made Part 2

- In 2012, Colorado considered this issue again with the draft and final permit renewal:
  - Looked at the existing information again and confirmed it supported a finding of hydrologic connection
  - Obtained additional information from the approved Western Sugar Cooperative augmentation plan. In accordance with that plan, the approved surface water augmentation is via the on-site recharge ponds.
  - Obtained information from the Office of the State Engineer and documented that this is a gaining reach of the South Platte River.
  - Applied ELGs
- Again, subject to public comment, appeal, etc.

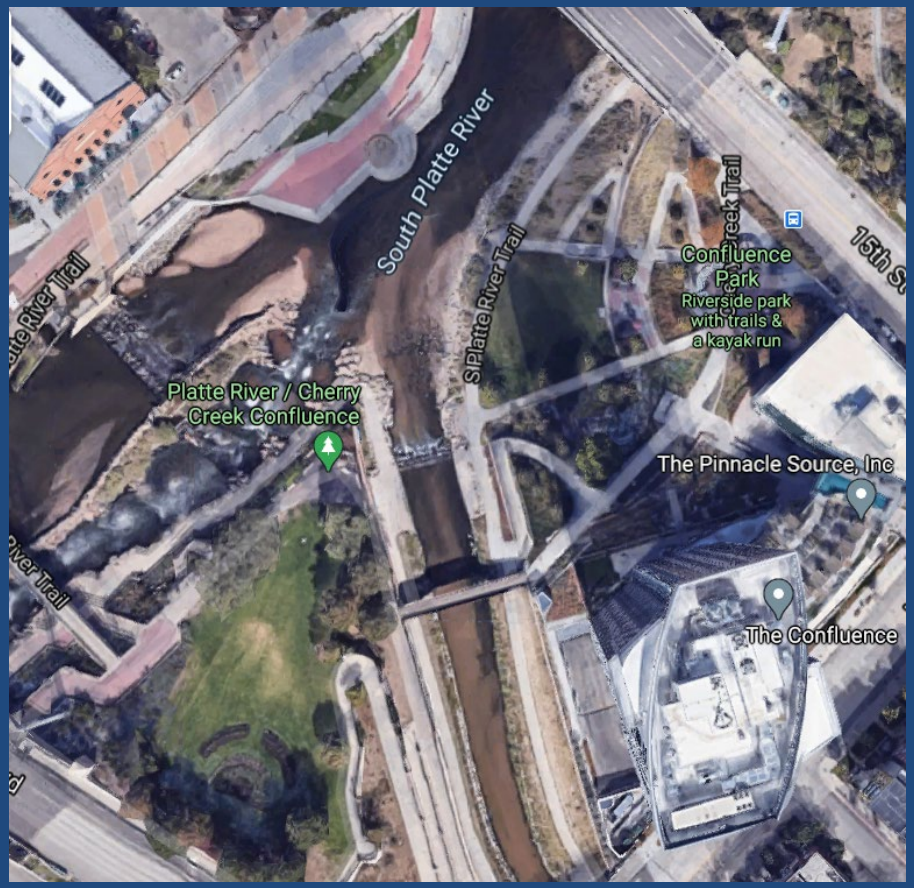
Hard rock mining example - Ouray Silver Mine, CO0000003

Ouray Silver Mine Example: 2017

- WQCD denied a request to terminate a surface water permit in 2017 at Ouray Silver Mine.
- The discharge of mine water effluent had been changed from a direct surface water discharge to being routed from the top of a bio-reactive bed into a perforated pipe buried in waste rock material.
- WQCD evaluated the discharge flow and site conditions and found the new discharge was in direct hydrologic connection to Sneffels Creek due to:
  - Unconsolidated nature of the waste rock material
  - Close proximity to Sneffels Creek (between 75 and 200 feet from the discharge location)

Tricky Example - Dewatering

- Long-term dewatering activity discharges at the confluence of the South Platte and Cherry Creek, can't meet selenium limits
- permittee applied for a Class V UIC well and built a shallow UIC well in the alluvium and asked to terminate their permit
- Colorado denied termination request, asked for evidence that it was not a surface water discharge



- Permittee submitted a very weak hydrological study that did not show it wasn't connected
- Permittee and Colorado agreed to move the point of compliance in existing permit to UIC well, remains a surface water discharge permit with selenium limits

Colorado's New COG590000 General Permit

- For domestics under 1 mgd with 100:1 dilution (so no antidegradation)
- **First Colorado general permit to specifically permit surface water discharges via hydrologically connected groundwater**
- OWTS
  - Does not apply to OWTS under 2,000 gpd, which are covered by counties
  - Special terms and flexibility are allowed for existing OWTS with leach fields around influent/effluent monitoring, E. Coli, ammonia
- Ground treatment
  - Allows the potential that ground will provide some treatment for TSS and BOD in leachfields
- Protection of groundwater uses
  - Includes special provision to allow for the application of more protective groundwater standards (effluent limitations for pH, TIN, chloride, sulfate, and total coliform) if there is a drinking water well directly in the area

Lessons Learned for Permitting

1. Focus on the clearest cases where surface waters are currently underprotected
2. If the system currently uses wells as the point of compliance, look at whether are they providing data representative of the discharge
3. Offer permittees the opportunity to submit a hydrological study before requiring a surface water permit application
    a. Requires some expertise in reviewing hydrologic studies!
4. Case-by-case determinations and flexibility may be needed for small existing OWTS, especially around monitoring, ammonia and E. Coli limits
5. Think about how to continue to protect groundwater, particularly any nearby drinking water wells
6. Consider working with other state agencies that regulate discharges to hydrologically connected groundwater, like mining agencies

Thank you!

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Extra slides

Older Applicable Federal Case Law in Colorado

Sierra Club v. Colo. Refining Co., 838 F. Supp. 1428 (D. Colo. 1993)

"[T]he Tenth Circuit has chosen to interpret the terminology of the Clean Water Act broadly to give full effect to Congress' declared goal and policy 'to restore and maintain the chemical, physical and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). With this in mind, I conclude that the Clean Water Act's preclusion of the discharge of any pollutant into 'navigable waters' includes such discharge which reaches 'navigable waters' through groundwater."