

City of Ashton Wastewater Treatment Plant Receiving Water Body Assessment

***Henry's Fork Watershed Council
March 10, 2015***

Henry's Fork Foundation and City of Ashton



Outline

1. Background
2. Regulatory issue
3. Resource issue
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5. Project area
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Background

- January 2015: Mayor Stronks asked Ashton residents to write legislators about wastewater treatment issue
- City of Ashton has incurred substantial water and sewer infrastructure debt:
 - 2006 - \$2.5 million to upgrade the wastewater system
 - 2010 - \$3.5 million to upgrade drinking water system
 - 2014 - \$2 to \$4 million *projected* to upgrade wastewater system by 2019



Public works infrastructure is becoming a greater financial burden for rural communities, including Ashton.



- \$6 million debt for water and wastewater
- 1,129 residents
- 500 households
- \$12,000 of debt per household
- 27.5% of households comprised of seniors
- \$38,000 - Median annual household income



Regulatory Issue: Documentation

- City issued National Pollution Discharge Elimination System (NPDES) permit for WWTP in 2014
 - Antidegradation Analysis, Step Two: Alternatives Analysis and Social and Economic Justification, dated January 9, 2013
 - Draft Section 401 Water Quality Certification for Draft NPDES Permit, dated April 15, 2013
 - USEPA Revised Fact Sheet on Draft NPDES Permit #ID0023710 (for public comment period beginning May 7, 2013)
 - Response by City of Ashton to draft Section 401 Water Quality Certification and draft NPDES Permit, dated July 8, 2013
 - Response to Comments on the Draft NPDES Permit for the City of Ashton, by USEPA, January 2014
 - Authorization to Discharge Under the NPDES, City of Ashton, Permit No. ID0023710, 28 January 2014

Regulatory Issue

- IDEQ has designated receiving body (swale) as supporting:
 - Salmonid spawning (implies early life stages present)
 - Primary contact recreation (swimming, possibility of ingestion)
 - Cold-water biota
- Meeting ammonia standard is primary reason for high cost of treatment upgrade
- City of Ashton claims that receiving body is an intermittent swale that supports none of these uses
- WWTP discharges only January-April
- Existing data (from IDEQ):
 - Two E. coli tests (August 2011)
 - Water temperature (August 22-29, 2011)
 - “BURP Lite” (August 2011)
 - Electrofishing report (October 3, 2013)
- We also have chemistry data from Discharge Monitoring Reports

Resource Issue

- Henry's Fork fishery worth ~\$50 million
- Fremont County first in state for economic value of recreational fishing
- HF from Warm River to Ashton Dam protected for:
 - Salmonid spawning
 - Primary contact recreation
 - Cold-water biota
- Does receiving body for Ashton WWTP discharge merit the same protection?
- Do the resources at stake justify the cost to City?



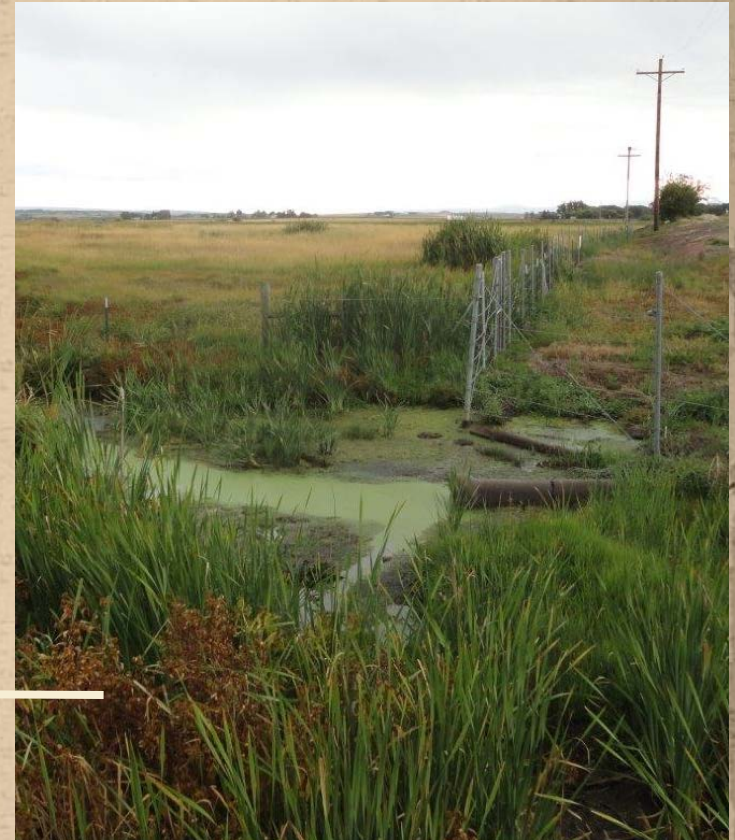
Why is Henry's Fork Foundation involved?

- HFF supports local economic development, while protecting fish, water, and aquatic resources, e.g.,
 - Hydroelectric power
 - Irrigated agriculture
- HFF emphasizes the resource, not the regulation
- Unnecessary regulation causes public skepticism of environmental regulations and agencies
- HFF provides technical assistance to agencies and other NGOs; why not the City of Ashton?
- Viable local community desirable
- Selfish reason: We're Ashton ratepayers, too!

Project Area



Discharge point



EPA photo, Sept. 2013
Plant not discharging



Effluent discharge point, March 9, 2015
Discharge rate: 70 gallons per minute (0.16 cfs)



Water originating in storm-water basin upstream of effluent discharge point flows (right to left) through weir.



Close-up of weir in September 2013.



Confluence of receiving body and 1 gpm spring
Location of compliance sampling point



1 gpm spring
(actually dry) in
September 2013.

“Perennial” is a
misnomer.



Receiving body during January 2015 (WWTP discharging).



Receiving body on March 9, 2015 (WWTP discharging).

Goals of Assessment

Provide data and analysis of sufficient quantity and quality to assess receiving body:

1. Hydrology (intermittent vs. perennial)
2. Presence/absence of fish (if, when, where, species)
3. Evidence of aquatic life (if, when, where, type?)



Assessment Plan

1. Hydrography

- Document (GPS and photos) entire “swale-shed” and spatial and temporal relationships among discharge, storm runoff, springs, etc.

2. Hydrology

- Quantify flow with pressure transducers and field measurements to develop stage-discharge (2 years); record temperature

3. Channel geomorphology

- Cross sections and longitudinal surveys, bulk substrate composition

4. Vegetation

- Plant species composition: aquatic, riparian, wetland, terrestrial

5. Aquatic macroinvertebrates

- Presence, absence, species?

6. Fish

- Electrofish several times per year, especially during discharge period and at times when early life stages might be present

Request to Henry's Fork Watershed Council

- Watershed Integrity Review and Evaluation (WIRE) endorsement
- Additional suggestions and assistance?

