

Public Stormwater Meeting

MONDAY, OCTOBER 17, 2022



Stormwater Terms

- ▶ **Stormwater** is rainwater or melted snow that runs off streets, lawns and other sites. When stormwater is absorbed into soil, it is filtered and ultimately replenishes aquifers or flows into streams and rivers.
- ▶ The Town of Bayfield does **NOT** treat stormwater before it discharges into the Los Pinos River
- ▶ A **Detention Basin** is a stormwater management facility that is designed to protect against flooding by storing water for a limited time and releasing it at a historic rates.
- ▶ A **Drainage Easement** legally provides the right to have water drain from one property onto another.
- ▶ A **Prescriptive Drainage Easement** is the uncontested use over the downstream property for a prescribed period of time by the upstream property.
- ▶ Swales, ditches, underground pipes, culverts and detention basins can all be located in a drainage easement.

Los Pinos River Protection

- ▶ Go easy on landscape fertilizer, use only recommended amounts.
- ▶ Nutrients found in commercial fertilizers like phosphorus and nitrogen can increase algae growth in the Los Pinos River killing fish and creating dead zones.
- ▶ Don't overwater, this creates excessive runoff.
- ▶ Plant native and drought tolerant vegetation that requires less water.
- ▶ Turn off sprinklers when it rains!



Los Pinos River Protection

- ▶ Run sprinklers only at night or early in the mornings during the summer per the Bayfield watering schedule.
- ▶ Colorado State University Extension guidance on lawn irrigation.
- ▶ Use commercial car washes instead of washing your car in the driveway. It uses 60% less water, and soaps, oils, grease and dirt go into the sewer system rather than flowing into the Los Pinos River.



Los Pinos River North of Town

Los Pinos River Protection

- ▶ Fix leaking vehicles so that oils, antifreeze or other fluids don't get washed into the Los Pinos River.
- ▶ If you have a vehicle leak, use cardboard or kitty litter to soak up the liquid and dispose of it properly.
- ▶ When changing car oil or radiator fluid, capture the used liquids and dispose of them properly at a local auto business or where hazardous waste is accepted.
- ▶ Pickup after your dog.



Los Pinos River Through Town

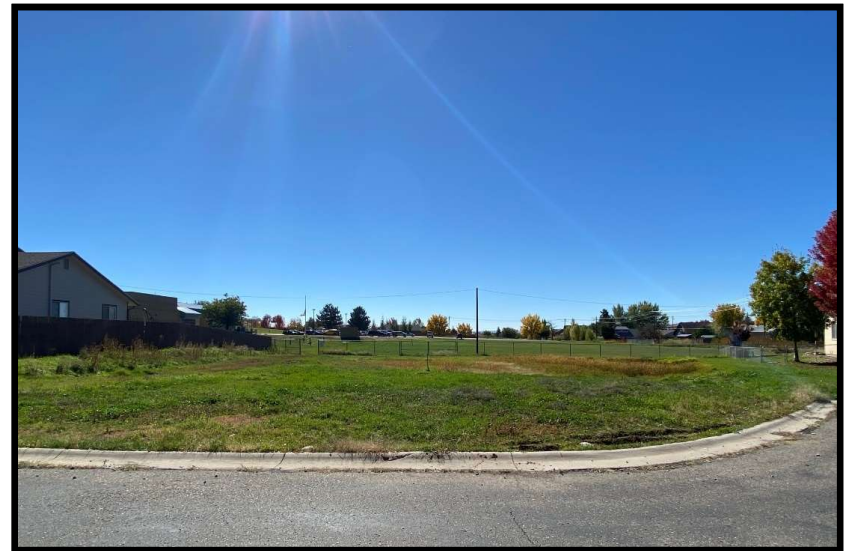
Stormwater in Bayfield

- ▶ 2014 Drainage Master Plan
- ▶ 2017 Infrastructure Design Standards for New Development
 - ▶ Drainage Report
 - ▶ Historic and developed conditions
 - ▶ Identify offsite drainage impacts
 - ▶ Maintain natural drainage patterns
 - ▶ Require stormwater facilities to be designed by Colorado Licensed Professional Engineer
- ▶ **June 26, 2022: 3" in just over 2 hours = 200+ year storm event**



Town Stormwater Maintenance

- ▶ Large debris is removed from public street stormwater inlets during and after storm events.
- ▶ In the fall leaves are removed from street gutters and storm grates to allow for snow melt to drain throughout the winter.
- ▶ Culvert cleaning is incident-based and performed in the event of a backup. This is for culverts crossing under Town streets and doesn't include private driveway culverts.
- ▶ Town owned detention basins are mowed throughout the spring and summer as needed.



Clover Meadows Phase 3 Detention Basin

Drainage Easements on Private Property

- ▶ Swales, ditches, underground pipes, culverts and detention basins can all be located in a drainage easement.
- ▶ When drainage easements are modified or disturbed by construction, grading, landscaping, fencing, etc. that **alter the flow and cause water to back up on the upstream property**, the owner of the downstream property may be liable for damages even if flooding takes place after the alteration.
- ▶ Most drainage easements are civil matters between property owners.



Clover Meadows Phase 6 Drainage Easement

Preparing Properties for Large Events

- ▶ To maintain drainage easements:
 - ▶ Mow swales and ditches to keep grass/weed heights low.
 - ▶ Keep bottom of swales and ditches open to permit flow of water after heavy rains.
 - ▶ Keep underground pipes and driveway culverts open and free of debris, rocks, grass and sediment.
 - ▶ Do not drive across a swale, ditch or underground stormwater pipe.
 - ▶ Maintain side slopes of swales and ditches from erosion.
 - ▶ Fences installed in the swale or ditch flow line may impede drainage.
 - ▶ Keep roof gutters clear of leaves and debris.



Private Culvert Under Private Driveway

Homeowner Association Responsibilities

- ▶ To maintain detention basins:
 - ▶ Install grass in basins to help filter pollutants and control erosion.
 - ▶ Mow basins to keep grass/weed heights low.
 - ▶ Remove sediment.
 - ▶ Keep trash and debris out.
 - ▶ Keep underground pipes open and free of debris, rocks, grass and sediment.
 - ▶ Maintain side slopes of basins to prevent erosion.
 - ▶ Clean grates and storm inlet vaults.
 - ▶ Maintain basin per the approved engineered design.



Clover Meadows Phase 7 Detention Basin

The Future of Stormwater in Bayfield

- ▶ Dove Ranch Detention Basin- **\$1,143,000**
- ▶ Stormwater Feasibility Plan - **\$70,000**
- ▶ Clover Meadows Phase 3 Detention Basin Maintenance - **\$10,000**
- ▶ Lupine Drive Storm Drain Inlets - **\$36,000**
- ▶ Mesa Park Stormwater Drainage Improvements - **\$60,000**
- ▶ Joint County/Town Yard Basin Improvements



Joint County/Town Detention Basin

How Do We Pay for Existing Stormwater Services?

- ▶ What service(s) does the Town **CUT** for Stormwater
 - ▶ Parks and Recreation Programs
 - ▶ 24/7 Marshal Coverage
 - ▶ Street Paving/Maintenance
 - ▶ Other?
- ▶ Fee like Water/Sewer/Trash?
- ▶ Tax?
- ▶ Or Do Nothing Different?



Public Input/Questions

Thank You

