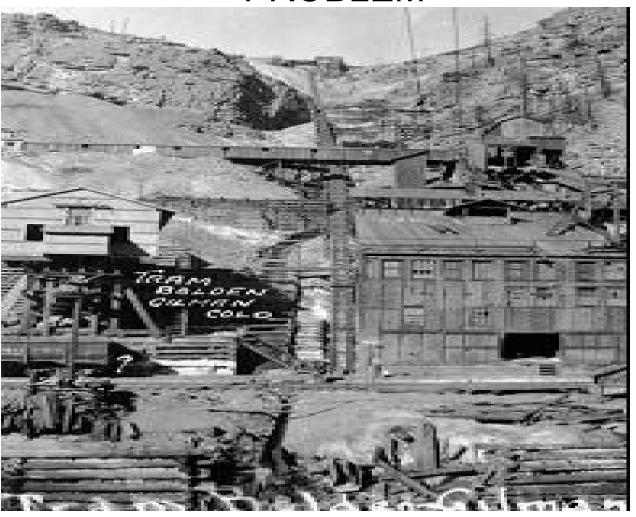


Eagle River Watershed Council Growth of a Watershed Group October 5, 2011

PROBLEM



Mine workings on the Eagle River in Belden Early 1900s

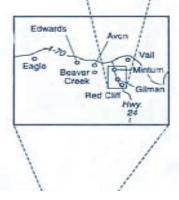
1984

- Mine closed & flooded
- Dissolved zinc, copper, cadmium, (arsenic,lead, iron, manganese)

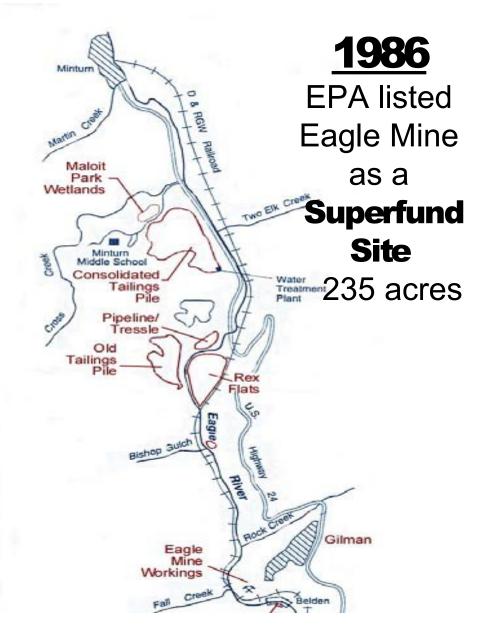
metal

salts ran into Eaglesse River

Catastrophic fish kills



AND VICINITY



Eagle Mine Superfund Site



1988

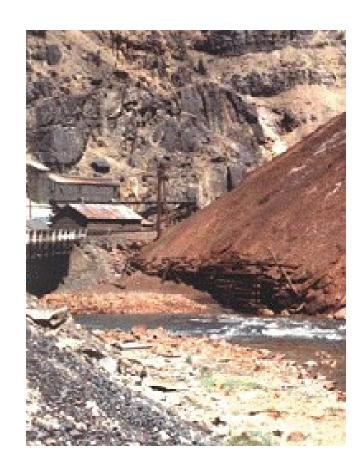
Volunteer citizens' group
Eagle River Environmental Business Alliance
(EREBA)
formed to monitor the EPA cleanup.

THEY HAD PLENTY TO MONITOR!

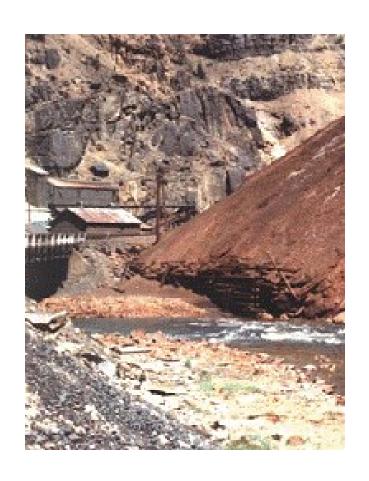
The clean-up project encountered problems, causing the Eagle River to turn orange and killing aquatic life for miles downstream.

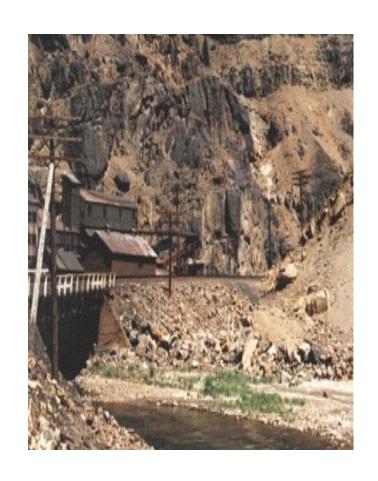
EPA HAD TO COME UP WITH NEW REMEDIATION PLANS – WHICH THEY DID.

Roaster Pile #3 at Belden



Roaster Pile #3 Remediation





1988 1994

Maloit Park 1988



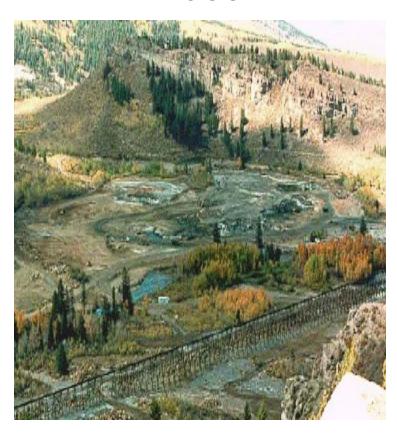
Maloit Park 1988

Maloit Park 1999

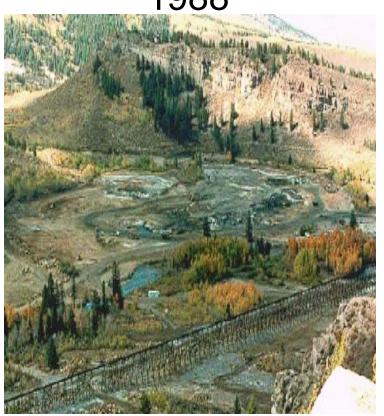




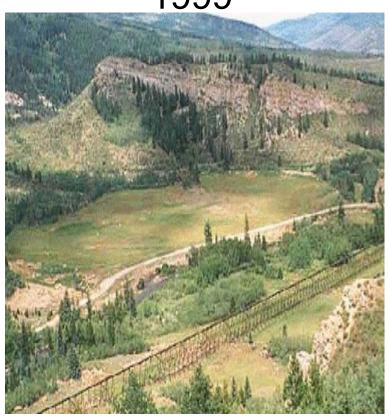
Old Tailings Pile Remediation 1988

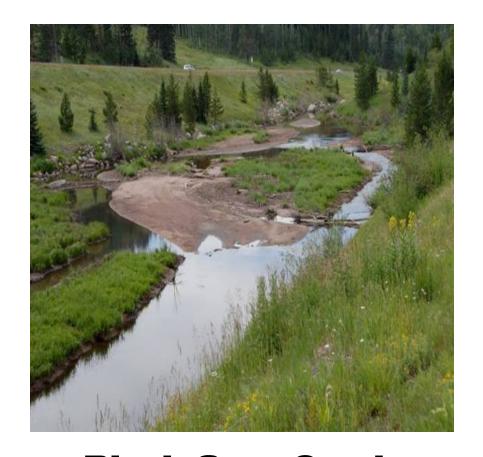


Old Tailings Pile Remediation 1988



Old Tailings Pile Remediation 1999





Black Gore Creek clogged with I-70 traction sand

<u>1990s</u>

Eagle County Watershed Groups

- EREBA
- Black Gore Creek
 Steering
 Committee
- Eagle River Clean Up
- Community Pride Highway Clean Up
- 208 Water Quality Plan
- White River National Forest Association
- Developers of the 1996
 Eagle River Watershed
 Plan

1996 Eagle River Watershed



Merged all groups into Eagle River Watershed "Committee"

1996 Eagle River Watershed Plan

101 pages – 3 years

1.Establish Eagle River Watershed "Committee" to generate and provide information/education to the community 2.Develop prioritized action plan and annual work programs around the following topics:

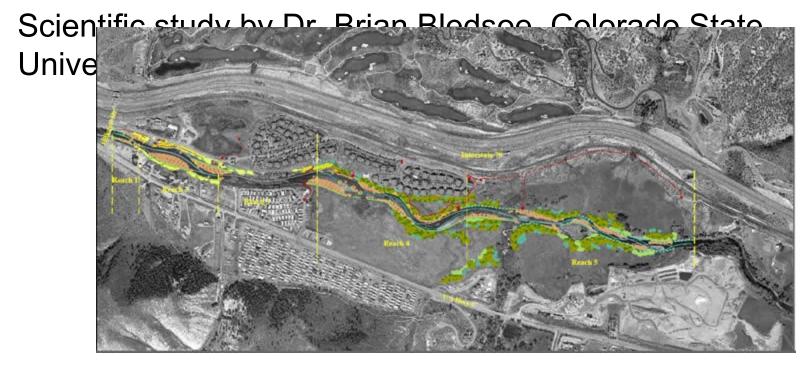
Water Quantity
Water Quality
Wildlife
Recreation
Land Use

2000 Hire full time person to run organization FUND RAISE!



Inventory and Assessment of the Eagle River

2003-2005



Identified Eagle River in Edwards as a priority for restoration

How to complete a \$4 million project? FUND RAISE!



and create partnerships



Eagle River in Edwards in low flow

Too wide for depth
Too warm
Poor fish habitat
treatment

Drops sediment
Lack of riparian vegetation
Mixing zone for wastewater
plant



Work in river to narrow channel to make river colder, faster, deeper during low flow - and some surprises!



Restoration complete... at least this section

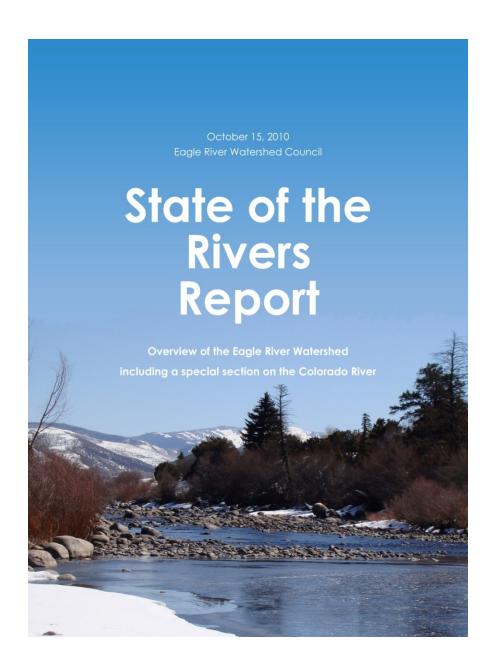




Get the community involved – and maybe get a new Board member!

Oh, and then you need to revegetate to hold the new banks, cool the river, and feed the macroinvertebrates that the fish like to eat.





2010

And when your community grows faster than your Watershed Plan...

- Take a look at how
 - you've done
- Report to the community
- Form a stakeholder group
- Update your

Growth of a Watershed Group

- 1.1984 Problem acid mine drainage
- 2.Loose partnerships created around the problem
- 3.1993-1996 Watershed Plan created creates recommended actions
- 4.1996 Eagle River Watershed Committee created Community

involvement

- 5.2000 Eagle River Watershed Council, Inc. create a **mission** statement and establish **501** (c) (3)
- 6.2000 Fund raise to hire full time coordinator
- 7. 2005 Inventory and Assessment of the Eagle River Scientific study by CSU

specifies 7 recommendations and 8 prioritized projects

- 8.2006 today Study utilized to raise **funds** for project realization
- 9.2008 \$4 mil. 1.6 mile Edwards Eagle River restoration started
- 10.2009 Exec. Dir. finds funds, hires **Staff** to accomplish other projects
- 11.2010 State of the Rivers report what's been accomplished &

monitored

FUND RAISE!



How does a Watershed Group really grow?

Staff!!

Each staff member is responsible for a project That project needs to be prefunded before hiring VISTAs – full time and summer interns

Volunteers!!

Board Community

How do you get volunteers?

Communicate

Growth of a Watershed Group

Problem

Plan

Community Involvement

Mission statement

501 (c)(3)

Fund raise

Coordinator

Scientific study

Prioritize projects

Fund raise

Hire staff

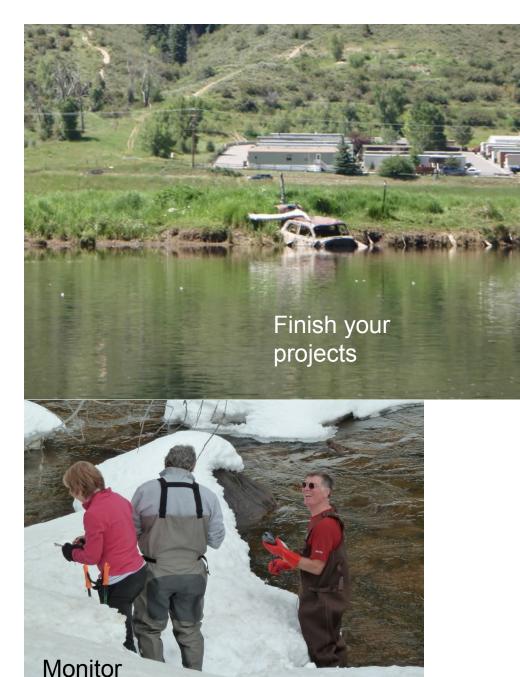
Publicize accomplishments

Monitor

Say thank you

Plan

Fundraise



Thank your funders!

Natural Resource Damage

Fund

CDPHE

CWCB

Eagle River Water & San.

District

Upper Eagle Regional Water

Auth.

Eagle County

Town of Vail

Town of Avon

Town of Eagle

Town of Gypsum

Town of Minturn

Vail Resorts Echo

El Pomar Foundation

CDOT

CRWCD

Arrowhead Metro District

Edwards Metro District

Denver Water



Marc's Questions...

What keeps stakeholders/donors/partners engaged?



Participation





Progres <u>s</u>





Progress reports
Black Gore Creek's
Basin of Last Resort
before and after

Recognition

Partners:

CDOT

US Forest

Service

Town of Vail

Fools County



What keeps you and staff energized and motivated?

What keeps you and staff energized and motivated?





and each other!!!

Most importantly... Your questions?

