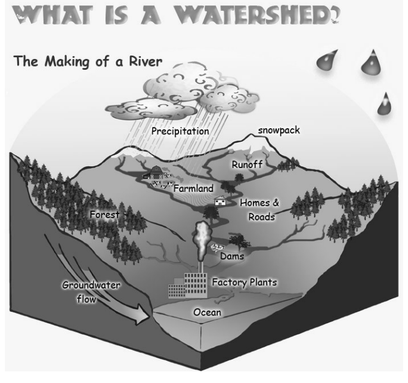
WHAT IS A WATERSHED?

A watershed is the area of land where all of the water that is under it or drains off of it goes into the same body of water. The Fairbanks Area is part of the Tanana Valley Watershed. The Tanana Valley watershed includes all the land that drains into the Tanana River. The Tanana River is a 584-mile long river originating at the confluence of the Chisana and Nabesna rivers just north of Northway and flowing into the Yukon River at the village of Tanana. This map features Green Infrastructure Projects that help to keep our watershed healthy by reducing the amount of runoff and pollutants that enter our rivers.



Welcome to Fairbanks Alaska's Golden Heart City

Population and other interesting facts:
City of Fairbanks: 32,000
Fairbanks North Star Borough: 100,000. At 7,631 square miles the Fairbanks North Star Borough is the size of New Jersey with a population density of 13.1 people per square mile.
The State of Alaska: 710,000 with 1.2 person per square mile. Alaska is 591,004 square miles, which is 2.21 times larger than Texas.

Shortest Day of possible sunshine:	Dec. 21 with 3 hr 42 min
Longest Day of possible sunshine:	June 21 with 21 hr 29 min
Recorded local weather & forecast	(907) 458-3745 (1 1 1)
Recorded statewide weather & forecasts	(907) 458-3745
Recorded highway conditions	5 1 1
Area code for all of Alaska is 907	

Parking is free in town, but scarce. Motorhomes & cars can park in the parking area in front of Sadler's store on Cushman St. (No overnight camping). Paid parking is available at the Downtown Parking Garage (clearance 7 ft.) on 3rd & Noble.

WHAT IS GREEN INFRASTRUCTURE?

Green Infrastructure Refers to techniques that help manage wet weather through infiltration, evapotranspiration, capture, and reuse of water from rain and melting snow. GI techniques are simple, cost-effective, sustainable and friendly to the environment. They help us manage rain and put it to a good use, protecting the health of our watershed and our homes.

WHY BUILD A GREEN INFRASTRUCTURE PROJECT?

Save Money
On water and increases your property value.

Protect Property
From damaging floods and increases the attractiveness of your property.

Keep Our Water Clean
GI projects capture and retain water that would otherwise turn into stormwater, carrying pollutants like fertilizer, animal waste, oil, gas and other chemicals, and trash directly into our water bodies.

Conserve Water
GI projects help you conserve water for other uses- in the garden or washing your home.

Protect Habitat
GI projects promote a healthy habitat by reducing the pollutants at their source before they enter the system of our rivers, streams, and riparian zones.

Healthy Fish and Wildlife
GI projects are a way to be a good neighbor to fish and wildlife because they help protect their homes and keep their food, shelter, and living space clean and healthy.

Very Worthwhile FREE Things To Do

Creamer's Field, Wildlife Refuge & Nature Trails, College Rd.
Fairbanks Arts Association Bear Gallery, Centennial Center, Pioneer Park
Fairbanks Arts Association Gazebo Nights 7 pm, Pioneer Park
Concerts in the Plaza Live music in the Golden Heart Plaza on First Avenue, weather permitting. Wednesdays, 7-8 p.m., Fridays noon to 1 pm 456-1984
Fairbanks Community Museum, Cushman & Fifth Ave.
Alaska Mining Hall of Fame Museum, 825 First Ave.
Tanana Valley Farmers Market, Wed, Sat & Sun, College Road
Tanana Valley Model Railroad Club, Railroad Depot. Summers daily 7 am to 8 am. **tvmrr.org**
Public Lands Info Center, Morris Thompson Cultural and Visitor Center - Exhibits
Geophysical Institute Summer Tours, UAF Campus, 474-6166
Cold Climate Housing Research Center, Thursday 2-3 pm, 457-3454, or visit **www.cchrc.org**
UAF Campus Summer Events: visit **uaf.edu/summer/events/**

TYPES OF GREEN INFRASTRUCTURE PROJECTS

Rain Barrels
Rain barrels capture water from your gutters and store it for grey water uses like watering plants and gardens. Water collected in rain barrels is not safe to drink.

Rain Gardens
Do you have a low section of land on your property? Consider transforming it from a muck pit to a productive rain garden! By planting a circular garden with water-tolerant plants, you can absorb rainfall and filter out harmful chemicals by diverting runoff from your home's gutters.

Tree Pits
Want to give your trees and your lawn a boost at the same time? By planting trees and shrubs in gravel lined pits and leaving a shallow depression around the base of the tree, you can collect diverted rainwater runoff and feed your trees in one simple design.

Infiltration and Flow-Through Planters
Want to water your garden less? Consider making a flow-through planter with an impervious bottom and a porous pipe that drains the water after it has been filtered by the plants and soil. Another type is an infiltration planter with a pervious bottom that allows water to infiltrate the ground below. These types of planters require less watering, provide filtration of pollutants, and are suitable in areas with limited space.

Dry Well
Does your home have trouble with flooding? A dry well is an underground structure that dissipates runoff from rainwater. A dry well is composed of a perforated pipe that directs roof runoff into a small pit lined with gravel. This pit helps filter harmful chemicals.

Swales and Berms
A vegetated swale is a grass-lined depression that uses plants to slows down runoff water and helps the water infiltrate the soil. They can be used to redirect runoff into other GI retaining projects like rain gardens, tree pits, or dry wells. Berms are low earthen walls adjacent to ditches that can be used to help retain runoff in a designated area along the downhill side of the desired location.

Green Roofs
Want to use the earth's insulation to save money on heating? A green roof is completely or partially covered with vegetation over several layers of waterproof membrane, root barrier, and a drainage board. A green roof can absorb up to half of the rainwater it receives and grow plants while also greatly increasing the isolative value of your roof. There are two basic types of green roofs: extensive and intensive. An extensive roof has a layer of growing medium that is six inches or less. Extensive roofs can support the growth of grasses and some small shrubs. An intensive roof has a six to twenty four inch layer of growing medium. Intensive roofs can support larger shrubs and even trees.

Permeable Pavers
Is your driveway causing runoff? Consider using permeable pavers, porous concrete blocks that allow water to pass through them and into the soil. Permeable pavers work for paths and walkways as well.

TYPES OF GREEN INFRASTRUCTURE PROJECTS CONT

Grass Reinforcement Mesh
Does your yard get muddy? A polyethylene grid placed directly on grass and secured with metal U-Pins or plastic pegs. It helps stabilize the grass so that it can handle much more traffic without damage. There are several grades of mesh, some of which are suitable for driving/parking vehicles and some of which is designed for foot traffic. The mesh can be used for everything from additional parking for a special event to a permanent patio.

STORM WATER 101

"Storm water" is surface runoff generated from rain and melting snow that flows over land instead of infiltrating into the ground. It is most readily observed as the by-product of urban growth where vast amounts of impervious land cover exists (i.e. paved streets, parking lots, driveways, building rooftops, etc.). The Fairbanks area has a storm drain system that conveys this surface water runoff away from public street rights-of-way and commercial and residential properties to nearby water bodies. The system is comprised of thousands of culverts and storm drain inlets, hundreds of miles of ditches and buried storm drain pipe, and hundreds of outfalls that serve as discharge points to nearby water bodies. As runoff travels over developed land surfaces, it accumulates a variety of pollutants that are transported by the storm drain system to local water bodies without treatment. The results can significantly alter our natural environment by contaminating drinking water supplies, making recreational areas unsafe and unpleasant, harming fish and wildlife populations, and impairing native vegetation. At the outfall, the pollutants collected in storm water can be readily seen discharging to local water bodies.

For more information, visit:

http://www.co.fairbanks.ak.us/PWorks/StormWaterManagementProgram/default.htm

Fairbanks Stormwater Advisory Committee

Ride the Borough Busses for a "Local Experience"

Hot Line info 459-1011 • Bus Depot 5th & Cushman. Busses run from about 6am - 9:30pm Mon-Fri, 9:15am - 7:45 pm Sat. Board at transit Depot (Cushman & 5th), at or near Fred Meyers, Safeways and other marked bus stops. Fare: $1.50 ($.75 military, youth. Seniors free) per boarding or get 5 tokens for $5. Drivers sell a day pass ($3.00) which is good for unlimited riding & transfers for the day of purchase on all of the bus routes. **fnsb.us/transportation/**

10 WAYS YOU CAN PREVENT STORM WATER POLLUTION

By practicing healthy household habits, homeowners can keep common pollutants like fertilizers, pesticides, grass clippings, automotive fluids, detergents, pet waste, and loose soil out of our storm water. Here's 10 ways you can prevent storm water pollution and help protect our local sloughs, creeks, rivers, and lakes.

Lawn & Garden Care

1. Use fertilizers and pesticides sparingly, only in recommended amounts, and avoid applications if the forecast calls for rain.

2. Select native plants and grasses for your lawn and garden. Native plants require less water, fertilizer, and pesticides.

3. Mulch, compost, or bag your yard waste. Grass clippings and leaves contain nitrogen and phosphorus, and when disposed/carried to a water body can cause algal blooms and reduce the amount of light and oxygen in the water, disadvantaging fish and other aquatic life.

Vehicle Care

4. Never dispose of automotive fluids down storm drains, onto the ground, or into a ditch.

5. Regularly check your vehicle for oil and antifreeze leaks to keep these fluids off paved surfaces where they are susceptible to being flushed into storm drainage systems.

6. Take your vehicle to a commercial car wash or wash it on a lawn or other unpaved surface. Detergents in wash water contain phosphates and other chemicals that can harm fish and other aquatic life.

Pet Care

7. Pick up after your pet outdoors if you are near a storm drainage system or water body. Pet waste can be a major source of bacteria and excess nutrients in local water bodies.

Home Improvements

8. Consider directing your downspouts away from paved surfaces and onto lawns to increase infiltration and reduce runoff. Or better yet, build a green infrastructure project!

9. Do not place piles of soil, mulch, or other landscaping materials in the street or on sidewalks where storm drainage systems are nearby.

10. Sweep up outdoor work areas prior to storm events to prevent materials from being washed into storm drainage systems.

FAIRBANKS SOIL & WATER CONSERVATION DISTRICT

FAIRBANKS SOIL & WATER CONSERVATION DISTRICT

Fairbanks Soil & Water Conservation District promotes sustainable land development and works with private landowners to address their natural resource concerns. By partnering with local, state and federal organizations, the FSWCD provides education and technical assistance to private landowners with issues related to soil, agriculture, water, invasive species, forestry, land development, and other related natural resource issues.

www.fairbankssoilwater.org

TVWA

Established in 2006, Tanana Valley Watershed Association promotes and improves the health of the Tanana Valley through education, restoration, collaborative research, and diverse community involvement. We work with residents, local government and agencies to develop stream enhancement plans that will improve the recreational value of our waterways, while maintaining or improving the fish and wildlife habitat values for future generations.

We strive to provide residents information, insight and tools they need to make positive changes in the watershed by working together to protect vital resources and the natural beauty of our region for current and future generations. To learn more and get involved with the Tanana Valley Watershed Association's programs, stop by their office on the fourth floor of the Lathrop building (516 2nd Avenue, Suite 412) in the heart of downtown.

For more information, visit:

tvwatershed.com

Fairbanks Green Infrastructure Group (GIG) is Here to Help www.fairbanksgig.com

Fairbanks Green Infrastructure Group

The Fairbanks Yellow Map is
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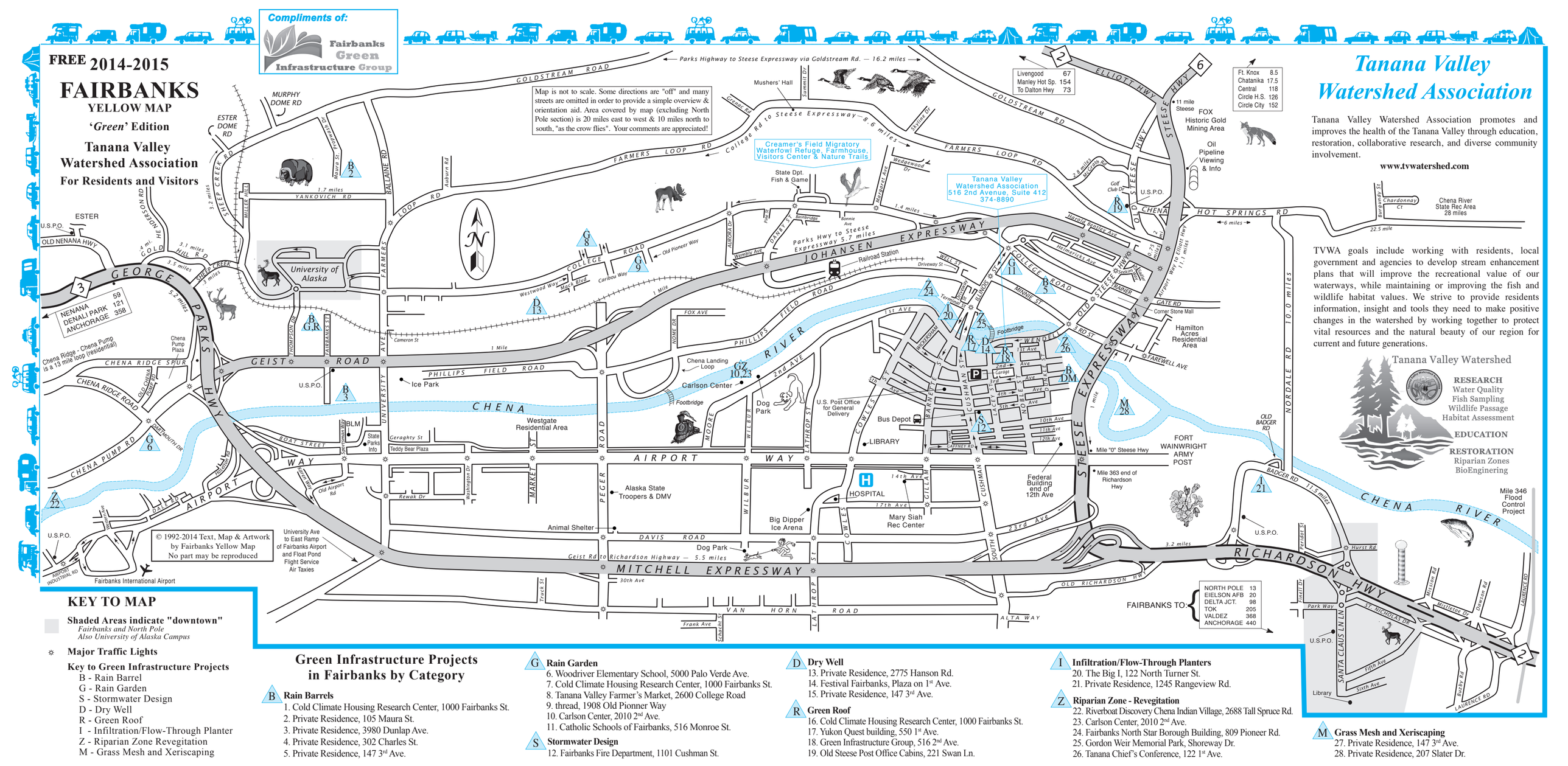
Your feedback and comments are most welcome.
Contact us by mail or email: **map@fairbanksyellowmap.com**



KEY TO MAP

Shaded Areas indicate "downtown"
Fairbanks and North Pole
Also University of Alaska Campus

Major Traffic Lights

Key to Green Infrastructure Projects
- B - Rain Barrel
- G - Rain Garden
- S - Stormwater Design
- D - Dry Well
- R - Green Roof
- I - Infiltration/Flow-Through Planter
- Z - Riparian Zone Revegitation
- M - Grass Mesh and Xeriscaping

Green Infrastructure Projects in Fairbanks by Category

B Rain Barrels
1. Cold Climate Housing Research Center, 1000 Fairbanks St.
2. Private Residence, 105 Maura St.
3. Private Residence, 3980 Dunlap Ave.
4. Private Residence, 302 Charles St.
5. Private Residence, 147 3rd Ave.

G Rain Garden
6. Woodriver Elementary School, 5000 Palo Verde Ave.
7. Cold Climate Housing Research Center, 1000 Fairbanks St.
8. Tanana Valley Farmer's Market, 2600 College Road
9. thread, 1908 Old Pionner Way
10. Carlson Center, 2010 2nd Ave.
11. Catholic Schools of Fairbanks, 516 Monroe St.

S Stormwater Design
12. Fairbanks Fire Department, 1101 Cushman St.

D Dry Well
13. Private Residence, 2775 Hanson Rd.
14. Festival Fairbanks, Plaza on 1st Ave.
15. Private Residence, 147 3rd Ave.

R Green Roof
16. Cold Climate Housing Research Center, 1000 Fairbanks St.
17. Yukon Quest building, 550 1st Ave.
18. Green Infrastructure Group, 516 2nd Ave.
19. Old Steese Post Office Cabins, 221 Swan Ln.

I Infiltration/Flow-Through Planters
20. The Big I, 122 North Turner St.
21. Private Residence, 1245 Rangeview Rd.

Z Riparian Zone - Revegitation
22. Riverboat Discovery Chena Indian Village, 2688 Tall Spruce Rd.
23. Carlson Center, 2010 2nd Ave.
24. Fairbanks North Star Borough Building, 809 Pioneer Rd.
25. Gordon Weir Memorial Park, Shoreway Dr.
26. Tanana Chief's Conference, 122 1st Ave.

M Grass Mesh and Xeriscaping
27. Private Residence, 147 3rd Ave.
28. Private Residence, 207 Slater Dr.

Tanana Valley Watershed Association

Tanana Valley Watershed Association promotes and improves the health of the Tanana Valley through education, restoration, collaborative research, and diverse community involvement.

www.tvwatershed.com

TVWA goals include working with residents, local government and agencies to develop stream enhancement plans that will improve the recreational value of our waterways, while maintaining or improving the fish and wildlife habitat values. We strive to provide residents information, insight and tools they need to make positive changes in the watershed by working together to protect vital resources and the natural beauty of our region for current and future generations.

Tanana Valley Watershed

RESEARCH
Water Quality
Fish Sampling
Wildlife Passage
Habitat Assessment

EDUCATION

RESTORATION
Riparian Zones
BioEngineering