

SUNSET POND

FLOOD CONTROL TODAY FOR A SAFE TOMORROW

THE SUNSET POND IS PART OF A REGIONAL FLOOD CONTROL PLAN TO SAFELY CONVEY RUNOFF FROM THE BLACK ARROYO DRAINAGE AREA TO THE RIO GRANDE.

THE POND WAS CONSTRUCTED BY SSCAFCA IN 2008 WITH PUBLIC BOND FUNDS TO PROVIDE FLOOD PROTECTION AND OTHER COMMUNITY BENEFITS.

THE POND'S PURPOSE:

FLOOD PROTECTION

The pond temporarily holds the runoff and slowly releases it into the existing channel, protecting downstream properties.



CLEANER STORMWATER

The pond reduces the amount of trash, sediment and pollutants in runoff entering the Rio Grande.

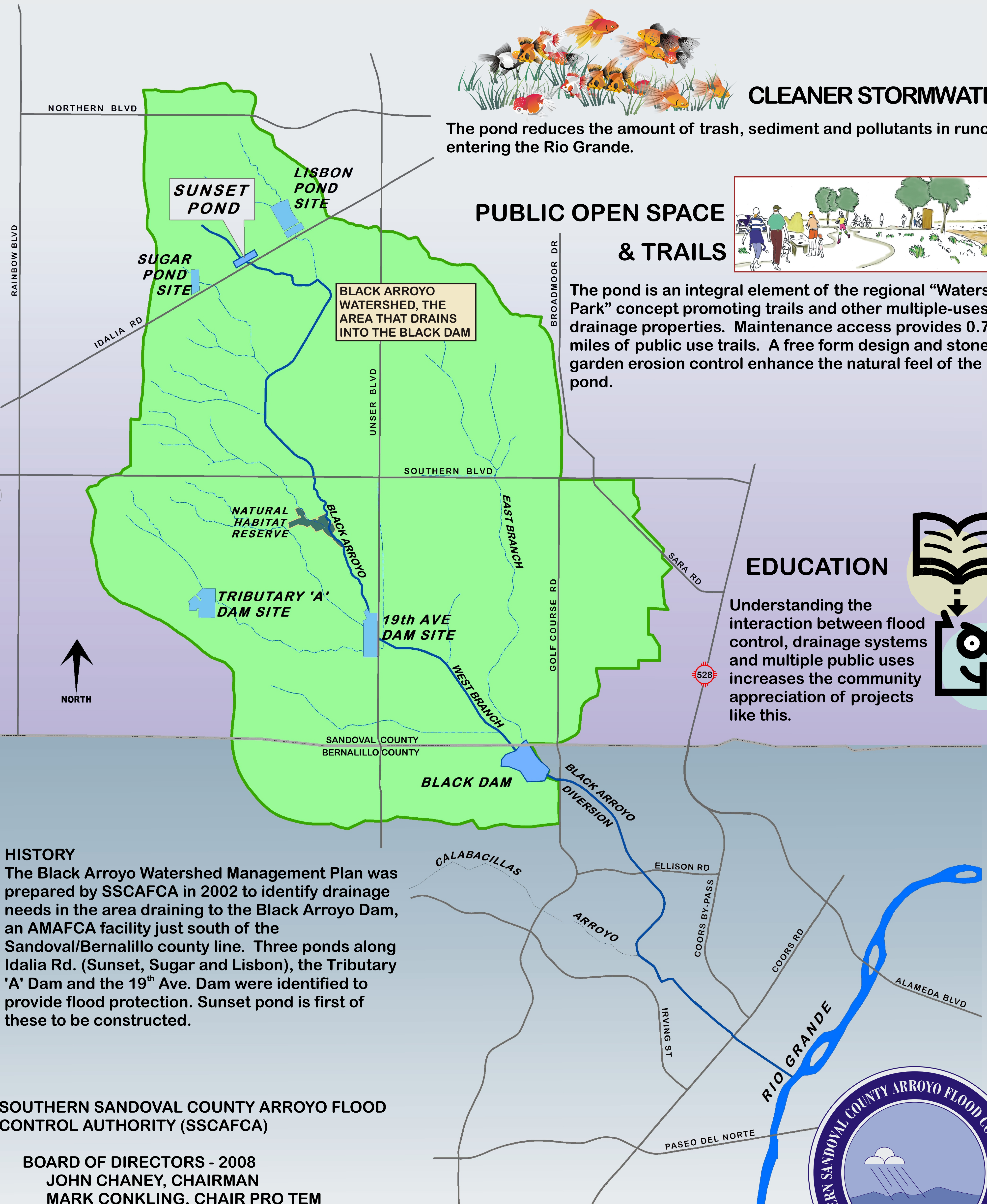
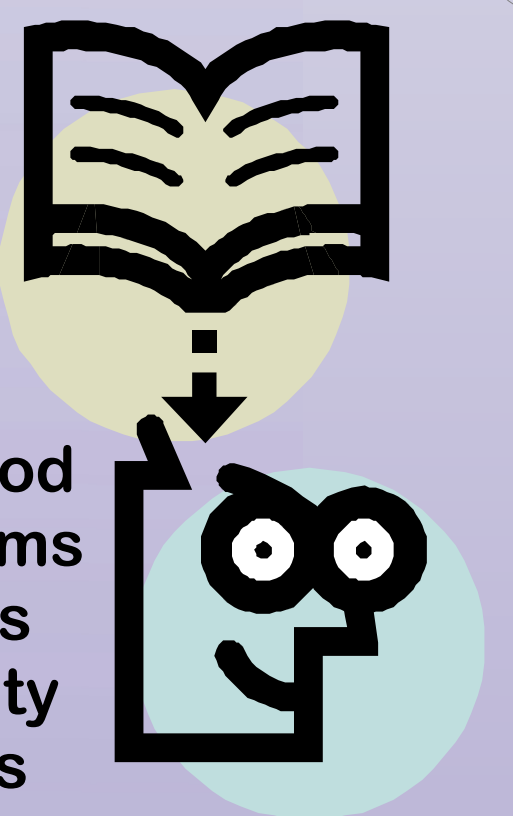
PUBLIC OPEN SPACE & TRAILS



The pond is an integral element of the regional "Watershed Park" concept promoting trails and other multiple-uses of drainage properties. Maintenance access provides 0.7 miles of public use trails. A free form design and stone garden erosion control enhance the natural feel of the pond.

EDUCATION

Understanding the interaction between flood control, drainage systems and multiple public uses increases the community appreciation of projects like this.



HISTORY

The Black Arroyo Watershed Management Plan was prepared by SSCAFCA in 2002 to identify drainage needs in the area draining to the Black Arroyo Dam, an AMAFCA facility just south of the Sandoval/Bernalillo county line. Three ponds along Idalia Rd. (Sunset, Sugar and Lisbon), the Tributary 'A' Dam and the 19th Ave. Dam were identified to provide flood protection. Sunset pond is first of these to be constructed.

SOUTHERN SANDOVAL COUNTY ARROYO FLOOD CONTROL AUTHORITY (SSCAFCA)

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SUNSET POND

FLOOD CONTROL TODAY FOR A SAFE TOMORROW

BE SAFE

THIS IS A FLOOD CONTROL FACILITY.
DO NOT ENTER WHEN WATER IS PRESENT.

ENJOY

YOU ARE WELCOME TO ENJOY THIS
COMPONENT OF THE "WATERSHED PARK" AND
HIKE OUR TRAILS.

PLEASE, PLEASE, PLEASE

•SCOOP THE POOP

Please pick up your animal waste and dispose of in waste containers. This reduces the bacteria pollution flowing to the Rio Grande.

•STAY ON THE TRAIL

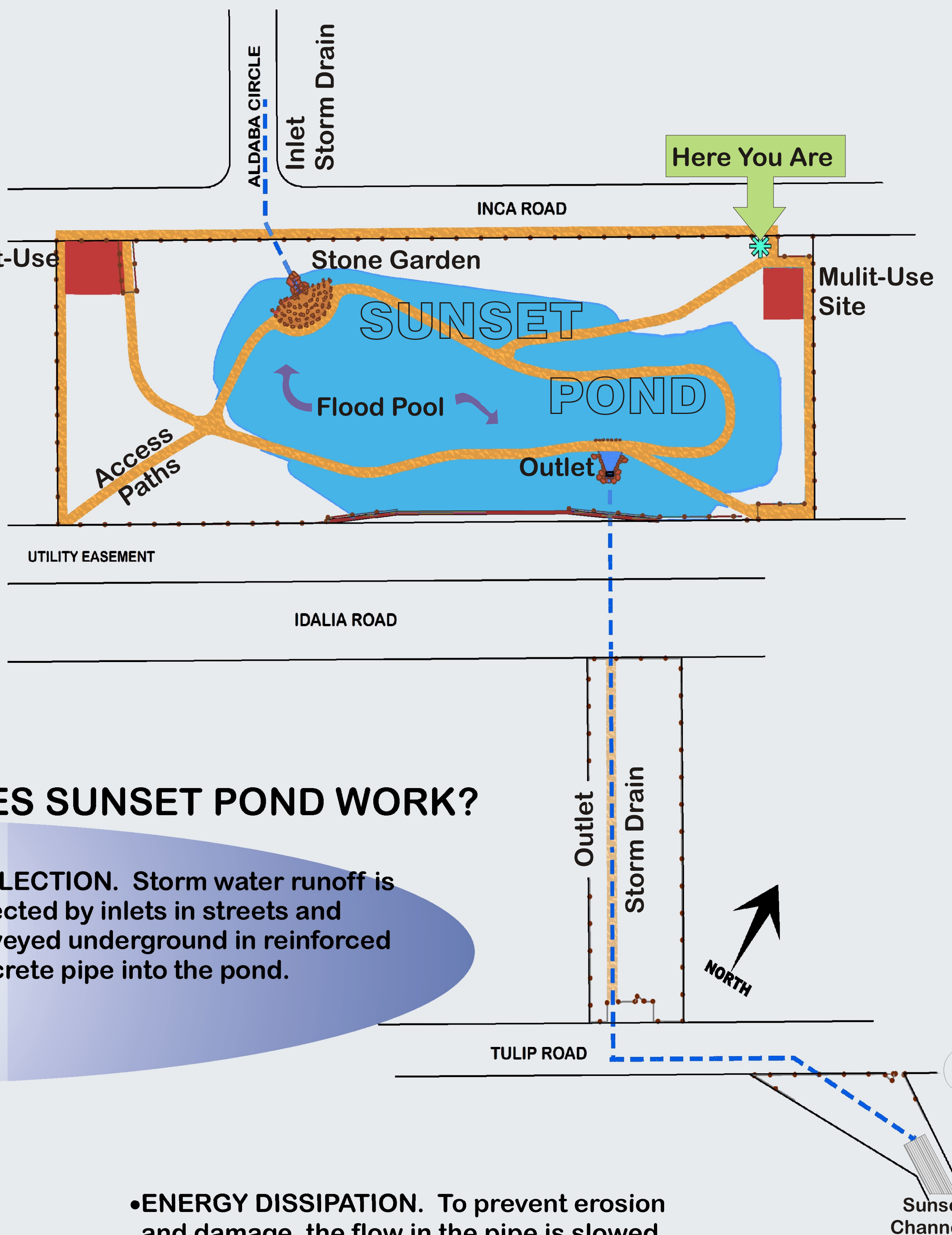
Help protect and preserve the habitat for all to enjoy.

•NO MOTORIZED VEHICLES

Preserve habitat. Please use designated motorized recreation areas.

•NO LITTERING, IT DOESN'T GO AWAY.

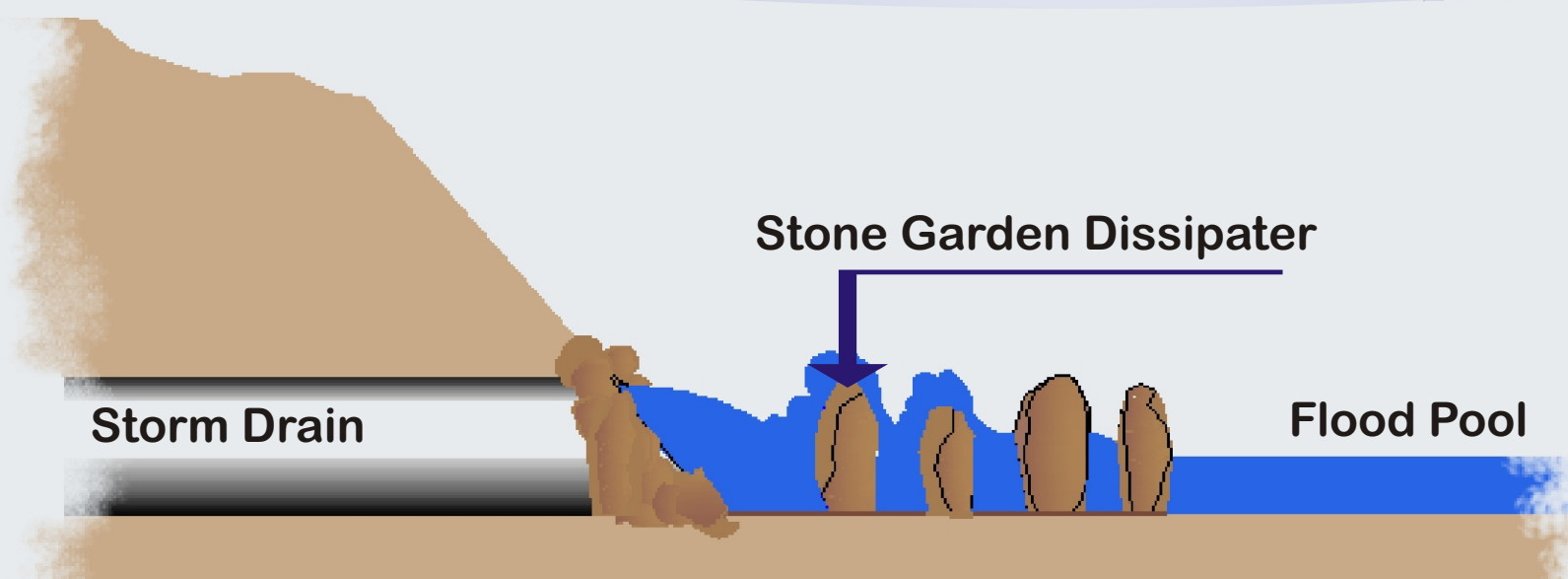
Cigarette Butts.....1-5 years
Aluminum cans.....80-100 years
Plastic six-pack holders.....100 years
Plastic bags.....10-20 years
Nylon Fabric.....30-40 years
Glass bottles.....a million years
Plastic bottles.....indefinitely



HOW DOES SUNSET POND WORK?

COLLECTION. Storm water runoff is collected by inlets in streets and conveyed underground in reinforced concrete pipe into the pond.

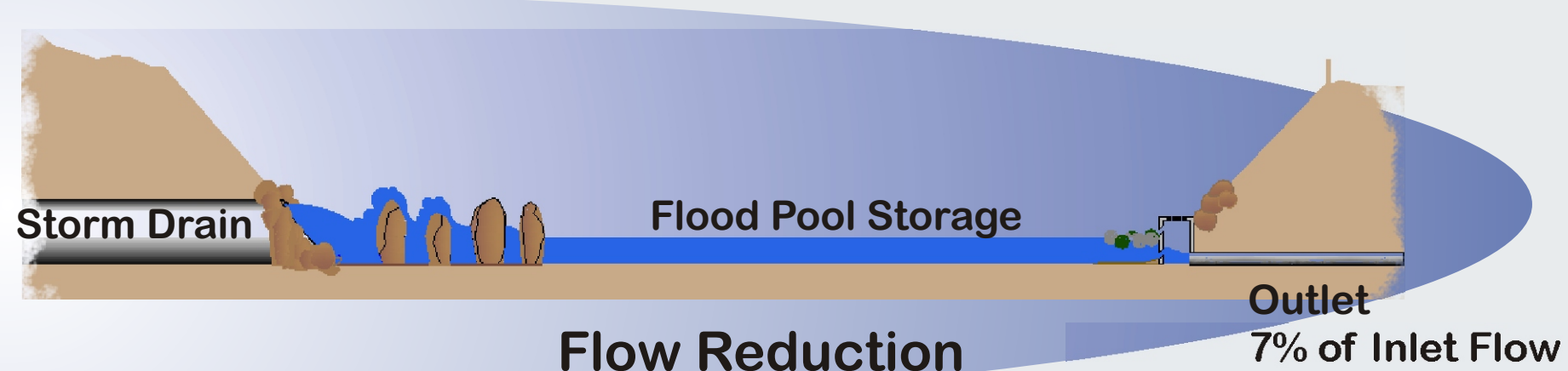
Storm Drain Collection



Energy Dissipation

•ENERGY DISSIPATION. To prevent erosion and damage, the flow in the pipe is slowed with the Stone Garden located at the end of the pipe. This is a trial to develop a natural looking energy dissipation structure.

•FLOW REDUCTION. A portion of the runoff volume is stored in the pond and slowly released preventing downstream flooding. This is the primary flood protection component of the Sunset Pond.



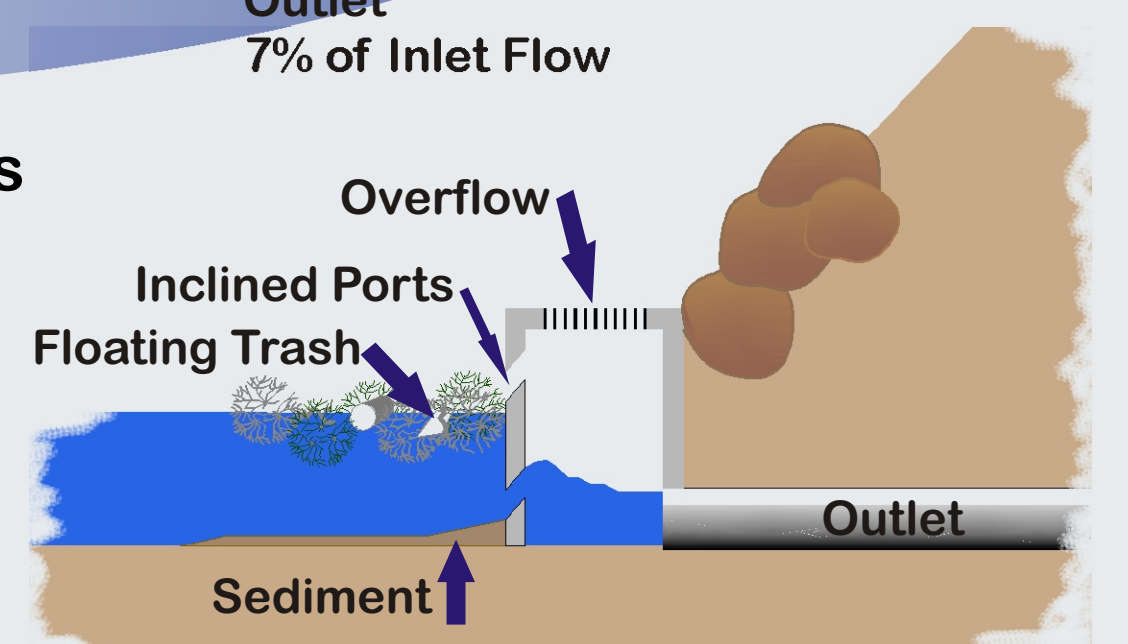
Flow Reduction

STORMWATER POLLUTION. Pollution is carried into the pond with the storm water. The pollutants trapped in the pond include trash and debris, sediment, nutrients and bacteria.

Trash and debris is reduced by trapping debris at the outlet.

Sediment settles out as the runoff slowly flows through the pond.

Nutrients and Bacteria from lawn fertilizer, pet feces, wildlife, oils, greases and metals from roadways are reduced by sunlight, wind action, plant root absorption and attachment to sediment particles.



Water Quality

SUNSET POND FACTOIDS

Drains to the Rio Grande ½ mile north of Paseo del Norte.
Area draining to the pond is 190 acres.
The pond is sized to contain the 100-year storm, 2.8 inches of rainfall.
The 100-year storm detention volume is 11.8 acre-feet.
The pond may take up to a day to drain.
Emergency overflow is provided by the southeastern concrete wall.
Peak inflow is 480 cfs and peak outlet flow is 36 cfs, a reduction of 92%.
The safety factor from overtopping during a 100-year storm is 150%.
Sunset Pond was constructed in 2008 by SSCAFCA.
Contractor - Salls Brothers Construction, Inc.
Engineer WHPacific, Inc.
Total project cost - \$2,500,000 + \$??? Property

NOTES:

1 CFS = 448 GALLONS PER MINUTE OR EMPTYING ABOUT 9 FULL BATHTUBS IN A MINUTE
1 ACRE FOOT = 1 ACRE (43,560 SQUARE FEET) COVERED WITH 1 FOOT OF WATER, ABOUT 326,000 GALLONS OR 6,000 FULL BATHTUBS
WATERSHED PARK. AN INTERCONNECTED LINEAR PARK ALONG ARROYOS, CHANNELS AND OTHER DRAINAGE FACILITIES THROUGHOUT RIO RANCHO, CORRALES AND BERNALILLO.
100-STORM. A RAINFALL EVENT WITH A ONE PERCENT (1%) PROBABILITY OF OCCURRENCE IN ANY GIVEN YEAR. 1.9" IN 1 HOUR, 2.3" IN 6 HOURS OR 2.8" OF RAIN IN 24 HOURS AT SUNSET POND.

