



Rain Bird Irrigation Supplement Project Portfolio





Mid-West Region

City of Bay Village, Ohio

Type of Project: Hanging Flower Baskets throughout Town

Product: 3" Perforated Tube & Cap

Site Report:

Owner: City of Bay Village, Ohio

Location: Downtown Area

Planting date: Seasonal watering, May through September

Average daily temps: 75° to 85° F

Plant materials: annuals

12 -17" by 9" hanging baskets were prepared by placing a 3" diameter perforated tube (to receive the IS gel pack) in the center of the hanging basket. Annual flowering plants were then planted around the tube and the baskets were watered thoroughly.

The previous watering schedule consisted of 2-3 times per week with a watering truck; this water regime took 2 people approximately 5 hours. By August 1st the baskets were completely burnt out and no longer viewed as city beautification.

This year the city was able to reduce the time spent watering from 2-3 days to one day per week and from 5 hours to less than 2 hours. In addition the manpower was reduced from 2 to 1.

By using IS time between watering has been increased from every 2-3 days to every 6-7 days. The Irrigation Supplement Gel Pack is replaced once a month; next year the city plans on replacing the IS every 3 weeks rather than once a month to ensure that the perforated sleeves never go dry leaving the flowering plants to flourish.

"I think that Rain Bird Irrigation Supplement is a great solution to a time consuming project. It has given my crew the ability to work on other projects without spending so much time watering. From past experience with flowering hanging baskets I would speculate that in order to have the same results we have now, it would require daily watering."

Jonathan Liskovec, City of Bay Village



Install Confidence.™ Install



Northern Region Agriculture - Vineyard Permanent Cropping

Type of Project: Interim Irrigation before Water Permits were available

Product: RBIS Quart Carton

Site Report:

Owner: Silverado Vineyard

Management: Walsh Vineyard Management

Place: Sonoma, CA

Planting Date: July 2001

Grape Stock: 101-14 / 3309c

Number of Vines: 33,000

Quarts/Vine: 2

Avg Daily Temp: 83° F

Bare root vines was placed in each hole and the root was then covered with approximately 1-inch of soil. Two Quarts of product were placed upright, directly against the vine (as seen in the top photo.) The vines were then dripped with one gallon of water , the holes were filled and mounded (as seen in second photo.) Each vine received a single drip irrigation of three-gallons per vine in August and September, then with two-gallons in October in hopes the vines would bud the first year. By mid-October, this goal was accomplished.

“After using DRiWATER on our replants for a couple of years, we found ourselves in a bind with 33 thousand vines having to go in the ground without adequate irrigation. With confidence we decided to use DRiWATER. After the superior growth rates on such a high volume planting we have decided to budget DRiWATER in for all our replants each year.”

**Brian Shepard, Walsh Vineyard Management,
VP & General Manager**



July 12, 2001 planting



September 21, 2001

Install Confidence.™ Install



Northern Region

Laramie Rivers Conservation District In Cooperation with Wyoming Department of Transportation And Wyoming State Forestry Division

Type of Project: Living Snow Fence

Product: Irrigation Supplement Quart

Site Report:

Location: Albany County, Wyoming

Planting: 2001-2002

Plant sizes: D-40 (deep one-gallons)

Number of plants: 350

Precipitation: 12" annually

Three species, native plum, rocky mountain juniper and lodge pole pines were planted in 4 rows that were 600 road feet long, for a total of 2,400 plant row feet. Conditions of the soil were very poor; soils were so dry and hard that a D-9 Caterpillar was brought in to rip the site before plants could be placed in the ground. The general climate conditions were very harsh with high cold winds and a short growing season of 2½ to 3 months long. A single unit (Quart) of Irrigation Supplement was used on each plant for one application.

Currently the site has a better than 85% success rate.

“Due to the isolated nature of our projects conventional irrigation systems are not practical or appropriate; it is this type of application that Irrigation Supplement is essential. We have and will continue to use Irrigation Supplement to enhance survival and growth of our conservation plantings.”

Jim Arnold, Wyoming State Forestry Division





Northern Region California Department of Transportation

Type of Project: Mitigation

Product: RBIS Quart Carton

Site Report:

Owner: Caltrans-California Department of Transportation

Place: Amador County, CA – Hwy 88

Planting Date: May 22, 1997

Number of Plants: 1,000

<u>Species Planted:</u>	<u>Size:</u>	<u>Units per Plant</u>
Oaks	24"	4
Cottonwoods	3.5'	4
Willows	3.5'	4
Elderberry	1'	2

Product applied at installation of plant materials and reapplied once.

Purpose: Mitigation compliance for Fish & Game 1601 permit requirements: Provide successful mitigation planting to restore 0.6 acres of wetlands. Four years post installation project maintained a greater than 90% survival.



Construction Site - May 1997



Initial Planting



After RBIS re-application - August 1997



August 1999



Western Region

City of Santa Rosa, California

Rain Bird Irrigation Supplement

Type of Project: Road Median Planting

Product: Irrigation Supplement 3" Tube and Gel Pac

Site Report:

Owner: City of Santa Rosa, Parks Department

Location: Corner median at College Drive and Hwy 101

Plant Sizes: Variety of native one-gallon plant materials

Number of plants: 65

Ave Daily Summer Temps: 83° to 90° F

Units per plant: Three 3" tube and gel packs per plant

The City of Santa Rosa approved the use of Rain Bird Irrigation Supplement for a project to beautify a city median that had been void of vegetation for 15 years. To hook a water meter to this area and bring in traditional irrigation would have had been cost prohibitive throughout the years. A local high school designed and built the median project using Irrigation Supplement to irrigate the plant materials. This site still remains an adopt-a-median site and is maintained by the local high school.

"We use Rain Bird Irrigation Supplement in areas like this median where irrigation is not available or where conventional irrigation would compromise the integrity of a slope."

Dan Neff, City of Santa Rosa, Parks Superintendent





Western Region

Williams Energy Company

Type of Project: Plant Salvage/Revegetation

Product: RBIS Quart Cartons

Site Report: Kern River Pipe Line Expansion

Owner: Williams Energy Company

Location: California, Nevada and Utah

Planting Date: 2003

Plant Sizes: Various

Number of Plants: 100,000 Joshua trees, yuccas, cacti and agaves

Units per plant: According to plant size

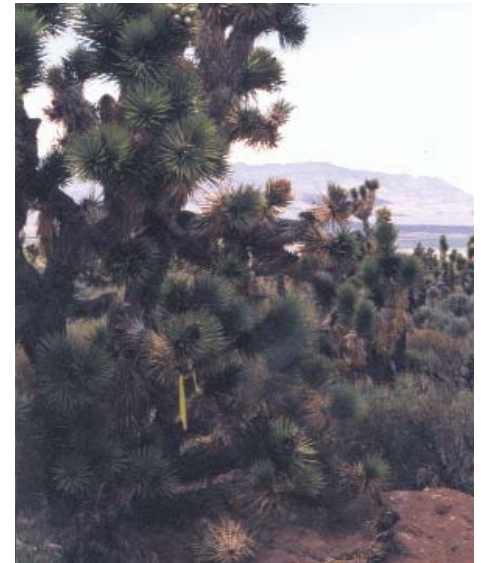
KRGT Plant Salvage Summary

In one of the largest plant salvage operations, crews flagged and transplanted nearly 100,000 plants growing within the right-of-way of the Kern River 2003 Expansion Project's southern spreads in California, Nevada and Utah. The salvage activities began in mid-August 2002 and continued through mid-December 2002. The re-planting of the plants back on to the right-of-way was completed between February and April 2003.

In a cooperative agreement with regulatory agencies and in compliance with the federal biological analysis Kern River agreed to collect and store many of the succulents including Joshua trees, yuccas, cacti and agaves growing in desert tortoise habitat; which is protected by the Endangered Species Act. The collected plants were stored in temporary nurseries near the right-of-way. Following construction, the plants were replanted in the right-of-way as part of the land restoration efforts. The removal of desert vegetation during construction has a long-term impact on the environment – regeneration can take more than 50 years; the arid environment in the southern spreads is not conducive to re-vegetation. A large-scale transplanting effort offered one of the best options for restoring the right-of-way. Reclamation documents approved by various agencies specified supplementing the nursery and final transplant watering efforts using Rain Bird Irrigation Supplement, to ensure that the restoration activities in the southern spreads are successful. Kern River will monitor the right-of-way for six years.

"Based on my past experience using IS on various mitigation/restoration projects and our companies history of plant salvage, we believe our overall, long-term restoration efforts will be successful. By using IS we are giving the plants the best chance of survival and we are able to leave the environment undisturbed while the plants reestablish."

Doug Sheehan, Vice President, Native Resources Nevada





Southern Region

Texas Department of Transportation

Type of Project: Roadside Revegetation -Replant

Product: Irrigation Supplement - 3" Tube and Gel Pac

Site Report:

Owner: Texas Transportation Department

Location: Amarillo, TX

Planting Date: July 1999

Plant Sizes: 5-gallon shrubs & 15-gallon trees

Number of Plants: 750

Avg Daily Temp: 85 to 90° F

Units per plant: 5-Gallon (4 units per plant) 15-Gallon
(8 units per plant)

The Texas Department of Transportation replaced native trees and shrubs that perished from a previously truck watered project along Highway 27 in Amarillo. To present the project has an 85% success of living native trees.

"Irrigation Supplement does exactly what it was meant to do. It delivers water during the establishment period. It makes plantings possible that would normally have to be truck watered. Irrigation Supplement is great for any replant situation. Once placed next to the plant you can be sure that your plants are receiving the moisture they need."

Chris Chambers, Landscape Architect, Amarillo District Office, TX-DOT



Western Region

City of San Clemente

Type of Project: Mitigation at a master planned community to offset lost wildlife habitat.

Product: RBIS 3" Tube and Gel Pack

Site Report:

Owner: City of San Clemente, Talega Associates

Location: San Clemente, California

Plant Sizes: One gallon

Number of Plants: 35,000

Plant types: Variety of native trees, shrubs and grasses

Units of IS per plant: one or two depending on species

Number of applications: three over a period of two years

Talega Development was required by law to establish a native habitat over a 100-acre setting providing wildlife habitat. A temporary irrigation system would have been cost prohibitive and the site was not conducive to hand or truck watering. The 3" Tube and Gel Packs was used and as each section was established the Tubes were pulled out and used on an adjacent section. The project was installed during a drought when the area was typically receiving approximately 4" of precipitation.





Western Region

Rancho California Water District

Type of Project: Mitigation

Product: 3" Tube and Gel Pac

Site Report:

Owner: Rancho California Water District

Location: Three separate facilities: Valle de Los Caballos Recharge Basin, Senga P.Doherty Reservoir and El Chimisal Reservoir (pictured)

Plant Sizes: One gallon native plants; Mexican Elderberry, Toyon, Scrub Oak, Honey Mesquite, Mulefat, Coyote Bush, and Emory's Baccharis.

Number of Plants: Approximately 1,100

Units Per Plant: One to two depending on plant species

LSA Associates, Inc. (an environmental consulting firm) has worked directly with Rancho California Water District since 1995 on all phases of their mitigation projects, from design to build and on into the monitoring phase. The purpose of these mitigation sites was to create wildlife habitat for specific bird species.



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