

**WEED MANAGEMENT PROGRAMS
NEVADA IRRIGATION DISTRICT
JANUARY, 2018**

NEVADA IRRIGATION DISTRICT BACKGROUND INFORMATION

Formed in 1921, Nevada Irrigation District (NID) supplies irrigation and treated water to approximately 23,000 customers within its 287,000 acre boundary, comprised within Nevada, Placer and Yuba Counties. The District operates and maintains 151 canals approximately 420 miles in length carrying water to irrigation customers and to the District's 8 water treatment plants. Water flows in the canals range from 1 cfs to 130 cfs.

NON-CROP WEED MANAGEMENT PROGRAMS

Terrestrial weed management

Bare ground herbicide program

Canal berms and access roads: The majority of these roads are dirt and are maintained weed free. Primary herbicides to be used in 2018 are:

Dimension 2EW and Gallery SC
Portfolio 4F California
Roundup Custom

Inside berms and De-watered canals: The water season ends October 15 and begins again April 1. During the off-irrigation season, the banks and bottoms (of De-watered canals) are treated with a pre-emergent herbicide. Primary herbicides to be used in 2018 are:

Payload and Roundup (de-watered canals)
Portfolio 4F California and Roundup Custom (down to high water mark)

Industrial Sites: This includes tank and pump sites, water treatment facilities, power plants, dam faces, etc. Primary herbicides to be used in 2018 are:

Dimension 2EW, Gallery SC and Roundup Custom

The above products are used during the off irrigation season of October 16 through March 30.

Vegetation management program

Broadleaf control on grassed areas: There are limited areas maintained with grasses for erosion control purposes. Primary herbicides to be used in 2018 are:

Dimension 2EW
Garlon 3A

Post-emergent herbicide applications: This includes all weeds during the irrigation season, terrestrial (non-aquatic). Primary herbicides to be used in 2018:

Roundup Custom
Capstone (poison oak and blackberries)
Garlon 3A (cut stump applications)

The above 5 products can be used year round.

Vegetation management program (continued)

Alternative control methods: We use alternative methods on areas that are suited for these operations and were they make fiscal since. These methods include:

- Goats
- Biological controls
- Hand cleaning
- Mechanical cleaning
- Thermal unit

Aquatic weed management

NID has operated under an NPDES permit since at least 2004. All aquatic weed herbicide applications are scheduled in advance. All of the customers are notified of the schedule and the operating procedures to follow before, during and after the application. Irrigation canal “spills” are closed during the herbicide application to prevent herbicides from reaching water that is defined as “Waters of The United States”. There are 3 sites where water goes back into natural water ways. These locations are noted in the NPDES and are monitored before, during and after each application. A biological evaluation is conducted annually to demonstrate that no damage to the ecosystem has occurred. This information is recorded and submitted to the State Water Quality Control Board per the requirements in NPDES permit.

Irrigation canal treatment during irrigation season

NID utilizes drip applications for this purpose and the following herbicides/algaecides.

Cascade: Targets - Sago, American and Curly leaf Pondweeds

Nautique: Targets – Elodea, Sago Pondweed

Citrine Plus: Targets – Algae

Citrine Ultra: Targets – Algae

Captain: Targets – Algae

Under limited locations when the algae bloom is aggressive we use Phcomycin or Green Clean Pro. These products are in a powder form and can be used between scheduled events. They are also OMRI listed for organic use.

All of the products used for Aquatic weed management are used April 1 to October 15 (during the water season).

Brian Morris
Nevada Irrigation District
1036 W. Main St.
Grass Valley, CA 95945
morrisb@nidwater.com