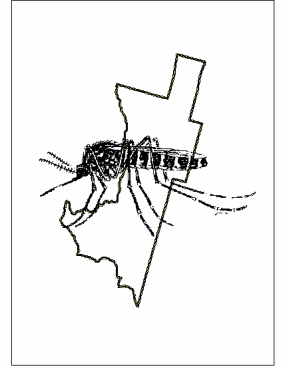


***Chiloquin Vector
Control District
2024***

Pesticide Use Plan

Chiloquin Vector Control District
PO Box 860
Chiloquin, OR 97624
info@trmvc.com
(541) 238-2272



March 7, 2024

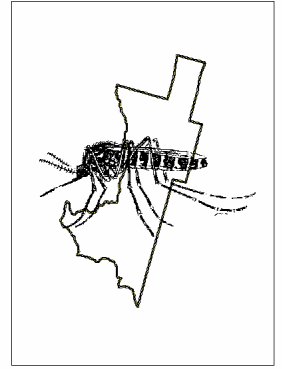
Oregon Health Division, ACDP
800 NE Oregon St. Ste. 772
Portland, OR 97232

Re: 2024 Pesticide Use Plan

Forwarded here for review process is the 2024 Pesticide Use Plan for the Chiloquin Vector Control District, Chiloquin, Oregon.

Thank you,

PO Box 860
Chiloquin, OR 97624
info@trmvc.com
(541) 238-2272



March 7, 2024

Oregon Dept. of Fish & Wildlife
Fish Division
Attn: Danette Faucera
Water Policy Coordinator
3406 Cherry Avenue NE
Salem, Oregon 97303

Phone: (503) 947-6092
Fax: (503) 947-6070
Email: danette.l.faucera@state.or.us

Re: 2024 Pesticide Use Plan

Forwarded here for review process is the 2024 Pesticide Use Plan for the Chiloquin Vector Control District, Chiloquin, Oregon.

Thank you,

VECTOR CONTROL PESTICIDE USE PLAN

This is a multi-part form. Page three is a **Target Pest Information** worksheet that must be filled out for each pest for which a treatment is planned during the season. Page four is a **Control Agent Worksheet**. This information must be supplied for each pesticide product or biological control agent that the district intends to use. Attach additional sheets as needed. A form containing the specified information in another format may be substituted, but, please include all information indicated on these forms.

District Name: Chiloquin Vector Control District

Date: March 7, 2024

APPLICATOR INFORMATION

Name: Horvath, Edward Stephen (Three Rivers Mosquito and Vector Control)

Address: 651 Market Street

City/Zip: Klamath Falls, Oregon 97601-6252

Telephone: (541) 238-2272

E-Mail: info@trmvc.com

Pesticide Operator License#: AG-L1021442CPO

Aerial Pesticide Applicator License#: AG-L1056549APA

CVCD is approximately 110 square miles on the east banks of Agency and Klamath Lakes, approximately 20 miles north of Klamath Falls, Oregon.

ADDITIONAL DISTRICT INFORMATION (complete only if there is a contact person who should receive official correspondence in addition to pesticide applicator):

District Contact Name/Title: Dennis Jefcoat, Chairman of the Board, CVCD

District Address: PO Box 860

District City/Zip: Chiloquin, Oregon 97624-0860

District Phone: (541) 783-2135 **FAX:** ()

PUBLIC NOTIFICATION METHOD (check all that apply):

Newspaper

Television

Radio

Mailer

Newsletter

Bulletin Board Notices

Recorded Telephone Message

Other Facebook Page and District website

PUBLIC NOTIFICATION INFORMATION (provide a short description of notification plan, i.e., timing, frequency, languages other than English, etc.):

CVCD provides public notices and educational information through posting on bulletins and through the community email based newsletter, along with postings on a CVCD Facebook page <https://www.facebook.com/ChiloquinVCD>. CVCD has also established a website for public information and education (www.chiloquinmosquito.org).

Vector Control Pesticide Use Plan: District:
Date:

Chiloquin Vector Control District:
March 7, 2024

TARGET PEST INFORMATION

IMPORTANT: COMPLETE ONE SHEET FOR EACH TARGET PEST

Target Pest: Check only one target pest per worksheet.

<input checked="" type="checkbox"/> Mosquito Larvae	<input type="checkbox"/> Domestic Rat	<input type="checkbox"/> Domestic Fly
<input type="checkbox"/> Mosquito Adult	<input type="checkbox"/> Other Pest (specify)	

MONITORING METHOD/TREATMENT THRESHOLD

(Indicate the monitoring method and threshold for treatment)

Monitoring Method: Monitoring method most used for mosquito larvae is the handheld dipper. Type of source, size and location, number found in each dip will determine what, if any, control method is to be used.

Treatment Threshold: Mosquito larvae counts exceeding five (5) mosquito larvae per dip will justify pesticide applications. Ridding the area of containers collecting water, drainage of small areas, soliciting public and property owners' assistance to abate a source whenever necessary to reduce the need for larvicides. Stage of larval development and density, organic content of source water, types of non-target species present, proximity to sensitive areas and weather conditions are some of the criteria also used to determine the appropriateness of materials used.

EFFICACY SAMPLING

(Indicate which treatments will be followed by an evaluation of efficacy, and what method will be used for the evaluation)

Checking of larvicide treatments for appropriateness of material used, completeness of application of material and the efficiency in reducing the number of mosquito larvae in the source area will be conducted within the following seven (7) days post application. Monitoring of service requests complaints near the source area will also be used to make judgments of effectiveness of applications of larvicide.

Bioassays are conducted for pesticide effectiveness, efficacy, and resistance monitoring.

SURVEILLANCE FOR IMPACTS ON NON-TARGET SPECIES

(List methods used to determine impacts on non-target species.)

Routine visual inspections are made to evaluate applications and to determine if there has been any non-target impact.

TOTAL NUMBER OF AGENTS (PESTICIDES AND BIOLOGICAL CONTROLS) TO BE USED FOR CONTROL: From 1 to 9

Vector Control Pesticide Use Plan: District:

Chiloquin Vector Control District:

Date:

March 7, 2024

TARGET PEST INFORMATION

IMPORTANT: COMPLETE ONE SHEET FOR EACH TARGET PEST

Target Pest: Check only one target pest per worksheet.

Mosquito Larvae

Domestic Rat

Domestic Fly

Mosquito Adult

Other Pest (specify)

MONITORING METHOD/TREATMENT THRESHOLD

(Indicate the monitoring method and threshold for treatment)

Monitoring Method: Method used to determine if treatment is necessary is by landing rate counts on humans and by CDC Light traps being monitored weekly. A technician enters a source area and the number of mosquitoes landing on him from the waist down for a period of 15 to 30 seconds is noted. Moving to another location approximately 100 feet further into the source area an additional count is observed. An average number of mosquitoes landing on the inspector over 60 seconds is used for threshold counts.

Treatment Threshold: Should a count of five (5) to ten (10) adult mosquitoes per minute, present at any location, some type of control is warranted and/or CDC light trap counts will equal or exceed five (5) mosquitoes per trapping hour to justify adulticiding. These threshold justifications for treatments are in accordance with NPDES General Permit 2300A.

EFFICACY SAMPLING

(Indicate which treatments will be followed by an evaluation of efficacy, and what method will be used for the evaluation)

Service requests and/or comments from land-users are used for efficacy of materials used, as well as a check by the applicator/inspector, through another landing count and follow-up CDC light trap counts. Weather and environmental changes; wind, rain, smoke from area forest fires and untreated properties outside the VCD often bring on an influx of adult mosquitoes into our area. CDC light traps are used to monitor populations and evaluate the effectiveness of the program by volunteer trained Board Members and TRMVC staff. Bioassays are conducted for pesticide effectiveness and resistance monitoring/evaluation.

SURVEILLANCE FOR IMPACTS ON NON-TARGET SPECIES

(List methods used to determine impacts on non-target species.)

Generally, adulticides are not species specific, however at the label rates and time applied, non-target species are at lesser risk. Applications are normally made in early morning hours before bees are active and foraging or in the evening to late nights during the hot summer. When ever applications are to be made in potentially sensitive areas, Oregon Department of Fish and Wildlife will be consulted. A buffer zone of 100-meters from stream edge is maintained to and monitored using liquid/chemical sensitive paper when adulticiding. When applications of an adulticide is required within the 100-meter buffer, an adulticide is used that is non-toxic to aquatic life such as Essentria IC³.

TOTAL NUMBER OF AGENTS (PESTICIDES AND BIOLOGICAL CONTROLS) TO BE USED FOR CONTROL: From 1 to 3

Larval

CONTROL AGENT WORKSHEETS

1. *Gambusia affinis*
2. *Macrocyclops albidus*
3. Agnique™ MMF
4. Altosid® XR Briquettes
5. Altosid® Liquid Larvicide
6. VectoLex® FG
7. VectoLex® WDG
8. Sustain MBG
9. Natular™ XRT

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: *Gambusia affinis* (Western Mosquito-fish)

EPA REGISTRATION#: N/A

ACTIVE INGREDIENTS:

Fish	100 %
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TARGET PEST:

Mosquito Larva

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

1.0 lb/A

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Fish Transport tanks, water.

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Ponds, Ditches, irrigation sumps and pools. Will only be placed in self-contained water bodies that are not connected to natural water bodies. Because mosquito fish are non-native fish, state law restricts their use to self-contained water bodies that are not fed or drained by natural waterways and where no other natural mosquito controls are present. These self-contained systems, which are called "aquaria," include ornamental ponds and livestock troughs, among others. Natural waterways include creeks, streams, sloughs, ponds, lakes, ditches connected to natural waterways, and ponds located in floodplain areas where flooding could allow the fish to enter natural waterways.

POUNDS OF GAMBUSIA TO BE USED: **25.00 lbs**

ACRES TO BE TREATED: **25.00 A**

POUNDS OF FISH USED LAST YEAR: **0.00 lbs**

ACRES TREATED LAST YEAR: **0.00 A**

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent
PRODUCT NAME: *Macrocyclus albidus*
EPA REGISTRATION#: N/A
ACTIVE INGREDIENTS:

<i>Macrocyclus albidus</i> (copepods)	100 %
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TARGET PEST:

Mosquito Larva

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

Approximately 0.0625 lb/A

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Fish Transport tanks, water.

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Ponds, Ditches, irrigation sumps and pools. Will only be placed in self-contained water bodies that are not connected to natural water bodies. We are restricting their use to self-contained water bodies that are not fed or drained by natural waterways and where no other natural mosquito controls are present. These self-contained systems, which are called "aquaria," include ornamental ponds and livestock troughs, among others. Natural waterways include creeks, streams, sloughs, ponds, lakes, ditches connected to natural waterways, and ponds located in floodplain areas where flooding could allow the fish to enter natural waterways.

POUNDS OF COPEPODS TO BE USED: **1.5625 lbs**
ACRES TO BE TREATED: **25.00 A**
POUNDS OF COPEPODS USED LAST YEAR: **0.00 lbs**
ACRES TREATED LAST YEAR: **0.00 A**

Vector control Pesticide Use Plan: District:

Chiloquin Vector Control District

Date:

March 7, 2024

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: Sunspray® MLO

EPA REGISTRATION#: 53263-28

ACTIVE INGREDIENTS:

Mineral Oil	98.8%
7.0148 lb-ai/Gallon	

TARGET PEST:

Mosquito, Larvae

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

1.0 – 5.0 gallons/acre

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Spray bottle, power sprayer and pressurized hand can.

LABEL

This product replaces Agnique® MMF

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Freshwater swamps and marshes, pastures, woodland pools and meadows, drainage areas, ditches and other man-made depressions where pupae and late 4th in-star larvae are to be eliminated.

POUNDS OF ACTIVE INGREDIENT TO BE USED: **35.074 lb-ai**

ACRES TO BE TREATED: **5.0 A**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **70.148 lb-ai**

ACRES TREATED LAST YEAR: **10.0 A**

Vector control Pesticide Use Plan: District Name **Chiloquin Vector Control District**
Date: **March 7, 2024**

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: Altosid® XR Briquettes

EPA REGISTRATION#: 2724-421

ACTIVE INGREDIENTS:

Methoprene 0.00145 lb-ai/briquette	2.1 %
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TARGET PEST:

Mosquito Larvae

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

1 per catch-basin or 1 per 100-200 square feet

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Hand Toss

[LABEL](#)

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Catch Basins, sumps, large troughs, small ponds.

POUNDS OF ACTIVE INGREDIENT TO BE USED: Approximately **50 ea**

ACRES TO BE TREATED: **500 sq ft**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **0.0145 lb-ai**

ACRES TREATED LAST YEAR: **100 sq ft**

Vector control Pesticide Use Plan: District
Date:

Chiloquin Vector Control District
March 7, 2024

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: Altosid® Liquid Larvicide

EPA REGISTRATION#: 2724-446-50809

ACTIVE INGREDIENTS:

Methoprene 0.43 lb-ai/Gallon	5.00 %
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TARGET PEST:

Mosquito Larvae

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

.027 - .05 lbs/A

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Power sprayer, pressurized truck mounted sprayer, and powered backpack sprayer.

Altosid® ALL is mixed with VectoBac® at a ratio of 1:6 and applied at a mixture rate of 2-16 oz/A.

[LABEL](#)

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Freshwater swamps and marshes, pastures, woodland pools and meadows, drainage areas, ditches and other man-made depressions.

POUNDS OF ACTIVE INGREDIENT TO BE USED: **1.50 lb-ai**

ACRES TO BE TREATED: **770.00 A**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **0.00 lb-ai**

ACRES TREATED LAST YEAR: **0.00 A**

Vector control Pesticide Use Plan: District:

Chiloquin Vector Control District

Date:

March 7, 2024

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: VectoLex® FG

EPA REGISTRATION#: 73049-20

ACTIVE INGREDIENTS:

<i>Bacillus sphaericus</i> 0.023B ITU/lb material	7.50%
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TARGET PEST:

Mosquito, Larvae

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

5.0-20.0 lbs/acre

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Applied by hand, Maruyama Belly Grinder, Maruyama backpack blower, horn seeded and/or sUAV.

[LABEL](#)

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Freshwater swamps and marshes, pastures, woodland pools and meadows, drainage areas, ditches and other man-made depressions where 1st through early 4th in-star larvae are to be eliminated.

POUNDS OF ACTIVE INGREDIENT TO BE USED: **1.15B ITU**

ACRES TO BE TREATED: **50.00 A**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **5.50 lb ai**

ACRES TREATED LAST YEAR: **60.00 A**

Vector control Pesticide Use Plan: District:

Chiloquin Vector Control District

Date:

March 7, 2024

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: VectoLex® WDG

EPA REGISTRATION#: 73049-57

ACTIVE INGREDIENTS:

<i>Bacillus sphaericus</i> 0.299B ITU/lb-material	51.2%
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TARGET PEST:

Mosquito, Larvae

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

0.5 – 1.5 lbs/Acre²

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Power sprayer, pressurized truck/ATV mounted sprayer, powered backpack sprayer and/or sUAVs..

[LABEL](#)

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Freshwater swamps and marshes, pastures, woodland pools and meadows, drainage areas, ditches and other man-made depressions where 1st through early 4th in-star larvae are to be eliminated.

POUNDS OF ACTIVE INGREDIENT TO BE USED: **100 ea material**

ACRES TO BE TREATED: **500 ft²**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **0.00 lbs-ai**

ACRES TREATED LAST YEAR: **0.00 A**

Vector control Pesticide Use Plan: District:

Chiloquin Vector Control District

Date:

March 7, 2024

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: Natular™ XRT

EPA REGISTRATION#: 8329-84

ACTIVE INGREDIENTS:

<i>Spinosad</i> 0.0055 lb ai/each	6.25%
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TARGET PEST:

Mosquito, Larvae

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

1 each per 100 ft²

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Applied by hand, in areas where small pockets of water produce mosquito larvae.

[LABEL](#)

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Catch basins, containers, troughs, secludes ponds.

POUNDS OF ACTIVE INGREDIENT TO BE USED: **100 ea material**

ACRES TO BE TREATED: **500 ft²**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **0.00 lb ai**

ACRES TREATED LAST YEAR: **0.00 A**

Adulticide

CONTROL AGENT WORKSHEETS

1. Aqualuer® 20-20
2. Aqua-Reslin®
3. Essentria™ IC³

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: Aqua-Reslin

EPA REGISTRATION#: 432-796

ACTIVE INGREDIENTS:

Permethrin	20.6 %
Piperonyl Butoxide Technical	20.6%
Inert Ingredients	58.8%
1.75 lb-ai/Gallon	

TARGET PEST:

Mosquito, Adult

RATE OF APPLICATION: (Give in units of pounds of active ingredient per acre and/or pounds of product per acre)

0.0035 lbs/A

APPLICATION METHOD: (Describe the application apparatus, product diluent, mixture, if any, and application process)

Ultra-Low-Volume Aerosol, Clarke Cougar with variable Smart Flow. Diluted with water and applied at a mixed rate of 0.83 oz/acre.

ULTA-Low-Volume Aerosol, London Fogger, MAG fogger mounted on an ATV, to treat hard to reach areas.

[LABEL](#)

APPLICATION SITE: (Describe the types of pest habitat where the product will be applied)

Pastures, Hay Fields, Residential Areas

POUNDS OF ACTIVE INGREDIENT TO BE USED: **35.00 lbs-ai**

ACRES TO BE TREATED: **Up to approximately 10,000.00 A**

POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **14.84 lbs-ai**

ACRES TREATED LAST YEAR: **4,239.00 A**

Vector control Pesticide Use Plan: District Name **Chiloquin Vector Control District**
Date: **March 7, 2024**

CONTROL AGENT WORKSHEET

IMPORTANT: Complete One Worksheet for each Control Agent

PRODUCT NAME: Essentria™ IC³
EPA REGISTRATION#: FIFRA 25(b) Exempt
ACTIVE INGREDIENTS:

Rosemary Oil	10.0%
Geraniol	5.0%
Peppermint Oil	2.0%
Other ingredients (<i>Oil of Wintergreen, White Mineral Oil, Vanillin, Polyglyceryl</i>)	83.00%
8.9 lb-ai/Gallon	

TARGET PEST:

Mosquito, Adults

RATE OF APPLICATION: (*Give in units of pounds of active ingredient per acre and/or pounds of product per acre*)

0.0577 lb/A

APPLICATION METHOD: (*Describe the application apparatus, product diluent, mixture, if any, and application process*)

To control adult mosquitoes using ground application, diluted 1 to 6 fluid ounces of Essentria IC³ per gallon of water. Treat harborage areas such as shrubbery and vegetation where mosquitoes may rest using an ATV mounted ULV generator and backpack misting sprayer. Shrubby and vegetation around stagnant pools, marshy areas, ponds and shorelines may be treated. Repeat as necessary.

[LABEL](#)

APPLICATION SITE: (*Describe the types of pest habitat where the product will be applied*)

Residential areas along the Williamson and Sprague Rivers and the Spring Creek residential units and Collier Park. This material is not toxic to aquatic life and may be applied over waters.

POUNDS OF ACTIVE INGREDIENT TO BE USED: **28.85 lb-ai**
ACRES TO BE TREATED: **Up to approximately 500.00 A**
POUNDS OF ACTIVE INGREDIENT USED LAST YEAR: **0.00 lb-ai**
ACRES TREATED LAST YEAR: **0.00 A**

Vector Control Pesticide Use Plan: District Name: **Chiloquin Vector Control District**

Date: **March 7, 2024**

SENSITIVE AREAS AND SPECIES

(Provide a description of sensitive areas. Map(s) that show sensitive areas, areas to be treated by larvaciding and areas to be treated by adulticiding should be on file with ODFW. If new sensitive areas are identified include new maps with this application.)

The Oregon Department of Fish and Wildlife (ODFW) has statutory authority under ORS 452.140 and ORS 452.245 to annually approve Pesticide Use Plans. ODFW recommends the treatment protocols outlined in the “Oregon Department of Fish and Wildlife’s Vector Control Guidance for Sensitive Areas” (attached) as a means to protect fish, wildlife, and their habitats while allowing for efficient and effective control of vector species to protect human health. The “Oregon Department of Fish and Wildlife’s Vector Control Guidance for Sensitive Areas” document provides ODFW’s recommendations only. Should the Chiloquin Vector Control District choose to implement an IPM plan that varies from ODFW’s recommendations, our authority comes from another source, such as label restrictions (EPA and FIFRA), NOAA and USFWS rules, ODA’s pesticide rules, DEQ’s Pesticide General Permit, and OHA’s annual PUP approval. Variation from ODFW’s recommendations does not constitute a violation of the PUP approval as long as all other State and Federal regulations are followed. The Chiloquin Vector Control District understands, however, that ODFW reserves the ability to more strictly implement their statutory authority at any time new research reveals threats to fish, wildlife, or their habitats or new products become available for use. In addition, ODFW requires prior communication with local staff concerning surveillance, issues or treatment on ODFW-owned or managed Wildlife Areas.

For adulticides with aquatic restrictions, CVCD will maintain and monitor a 100-meter buffer from all fish bearing waters.

EDUCATIONAL ACTIVITIES OF DISTRICT

(Provide a brief description of educational outreach, including programs for source control in the community.)

TRMVC educates the public through fliers, news releases and social media (i.e.facebook.com). This information includes how to help with mosquito reduction, general mosquito and disease information and updates of mosquito borne disease updates and news from the region. If needed in an emergency, we have access to television news and radio.

We have put together educational coloring and activity books for the school aged children of the district and are available as PDF files.

Games and puzzles to help educate and entertain the younger community are also available.