United States
Environmental Protection
Agency

March 2000

Pesticides And Toxic Substances (H-7506C)

Protecting Endangered Species

Interim Measures for Use of Pesticides in Shasta County

The federal Endangered Species Act is intended to protect and promote the recovery of animals and plants that are in danger of becoming extinct due to human activities. Under the Act, the U.S. Environmental Protection Agency (U.S. EPA) must ensure that the use of pesticides it registers will not result in harm to the species listed as endangered or threatened by the U.S. Fish and Wildlife Service, or to habitat critical to those species' survival. This program will protect endangered and threatened species from harm due to pesticide use.

The information provided in this bulletin is similar to what U.S. EPA expects to distribute once the Endangered Species Protection Program is in effect. Individuals who use pesticides during this interim period are not legally required to comply with these suggested measures. At the present time, compliance with the requirements specified on the pesticide product labeling will satisfy all legal requirements regarding pesticides and endangered species protection. While these pesticide use conditions do not yet have the force of law, they are being provided now for your use in voluntarily protecting endangered and threatened species.

Your comments are needed regarding the information presented in this publication. Please contact us to let us know whether the information is clear and correct. Also tell us to what extent following the recommended measures would affect your pesticide use program. This information will be considered by U.S. EPA during the final stages of program development.

Please submit comments to:
DPR Pesticide Registration Branch
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http://www.cdpr.ca.gov/docs/es/index.htm

About This Publication

This publication contains a map of the county including a shaded area where pesticide use should be limited to protect listed species. In the Section List, you will find additional information on the individual species that occur in each section, indexed by county, township, range and section.

The Species Descriptions table lists the taxonomic groups for each species. The Active Ingredients tables list certain pesticides and the activity category (mode of action, etc.) of the pesticide and the taxonomic groups they could adversely affect. The use limitations in this bulletin apply only to listed pesticides where the hazard class of the pesticide matches the hazard class (sensitivity of the taxonomic group) of the species that occur in the section where the pesticide will be used. Within a given section, use limitations only apply to sites that are consistent with habitat as noted in the Species Descriptions table. The Use Limitation Codes table indicates which use limitation codes apply to each species. The Use Limitations table translates limitation codes to use limitations.

Does This Information Apply To You?

To determine whether this information applies to your use of a pesticide, review the questions below. The information applies only if you answer "yes" to all three of these questions:

- Do you intend to use pesticides within the shaded area on the map (p 3) that is further detailed in the Section List (p 39)? If so, note the species from the Section List.
- Are any of the ingredients included in your pesticide product named in the Active Ingredients tables (p 10, 17, 21, 24, 27)?
- If so, does the hazard class(es) of the pesticide you intend to use match one or more of the taxonomic groups of the species as shown in the Species Descriptions table (p 34)?

If you answer "yes" to all three questions, you should follow the instructions on "How to Use This Information" (p 2) to help protect listed species.

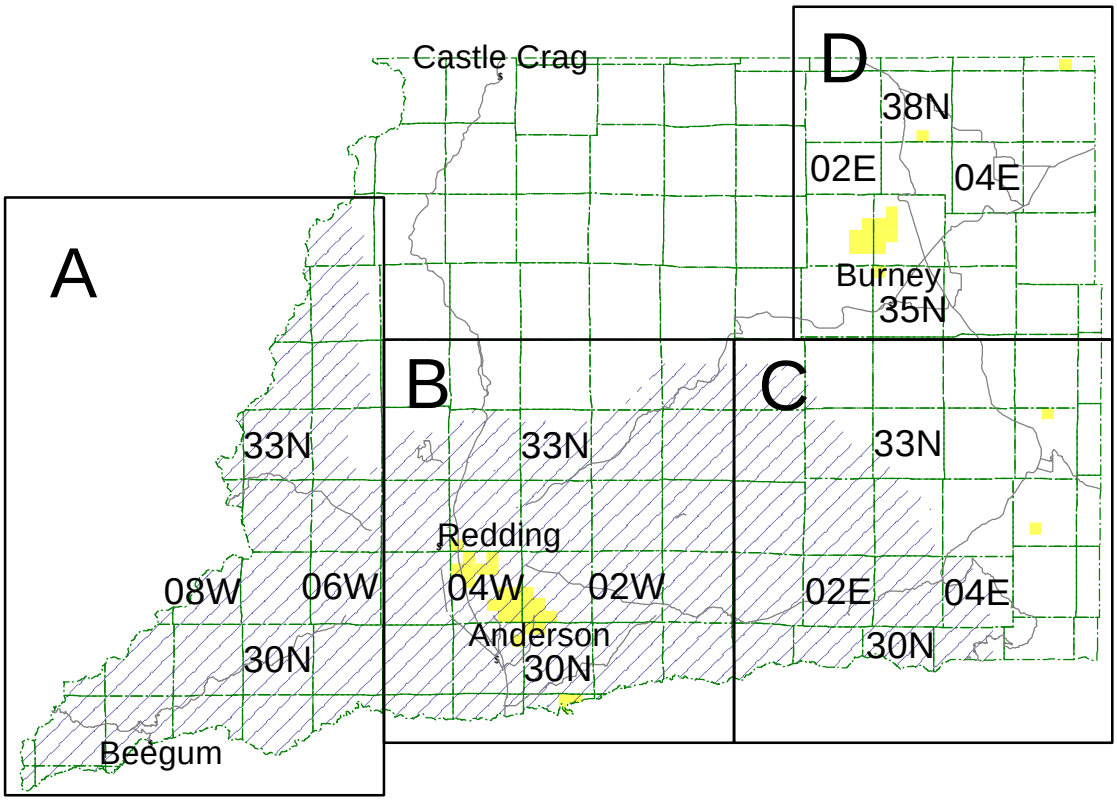
If you answer "no" to any of the above questions, this bulletin does not apply to you.

How to Use This Information

See worksheets for each class of pesticide that you intend to use:

Worksheets	Page
Herbicides	8
Insecticides	15
Fungicides	20
Rodenticides - Grain Baits	23
Rodenticides - Fumigants	26

Distribution of Species Addressed in This Bulletin

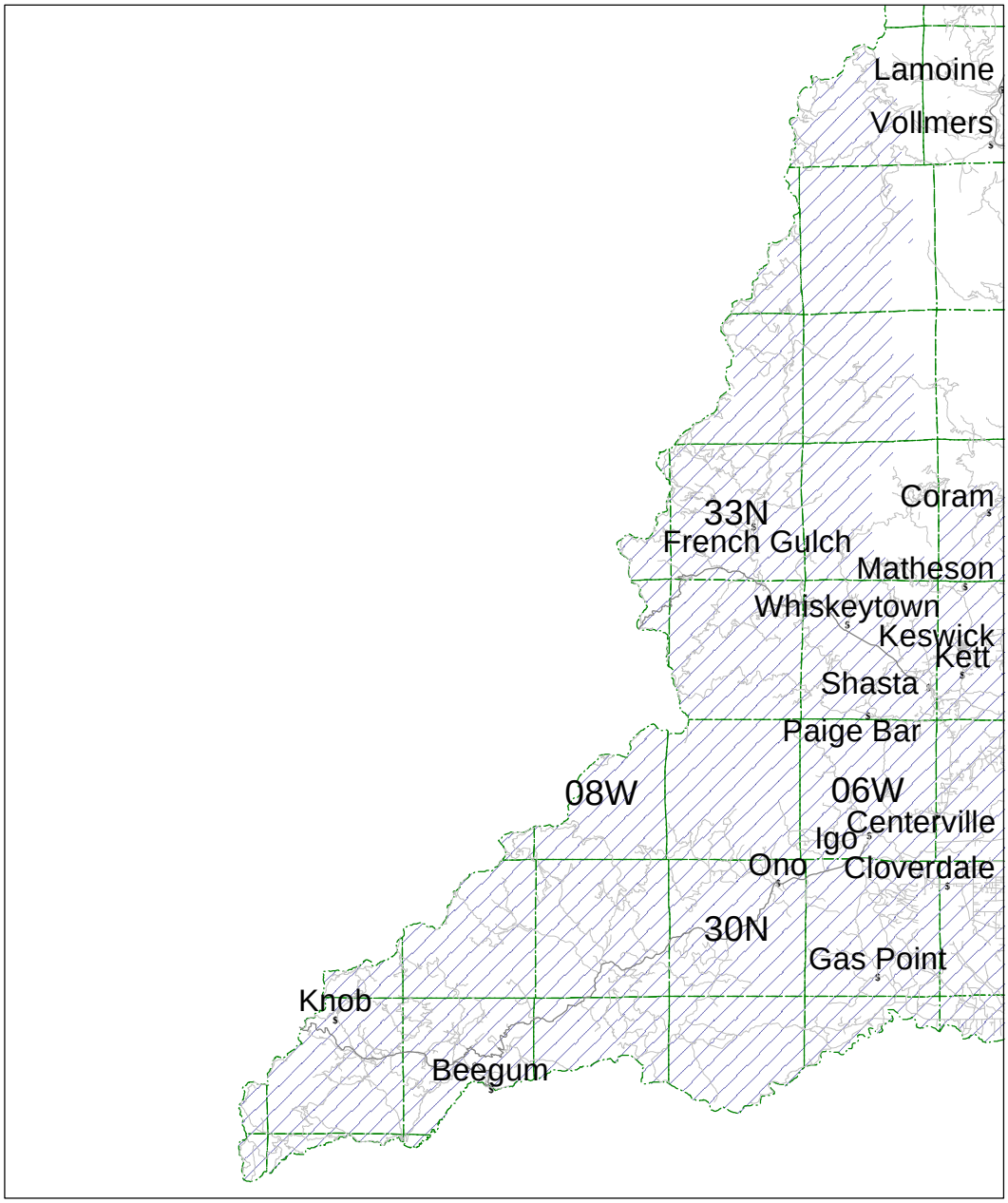


Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Overview Map

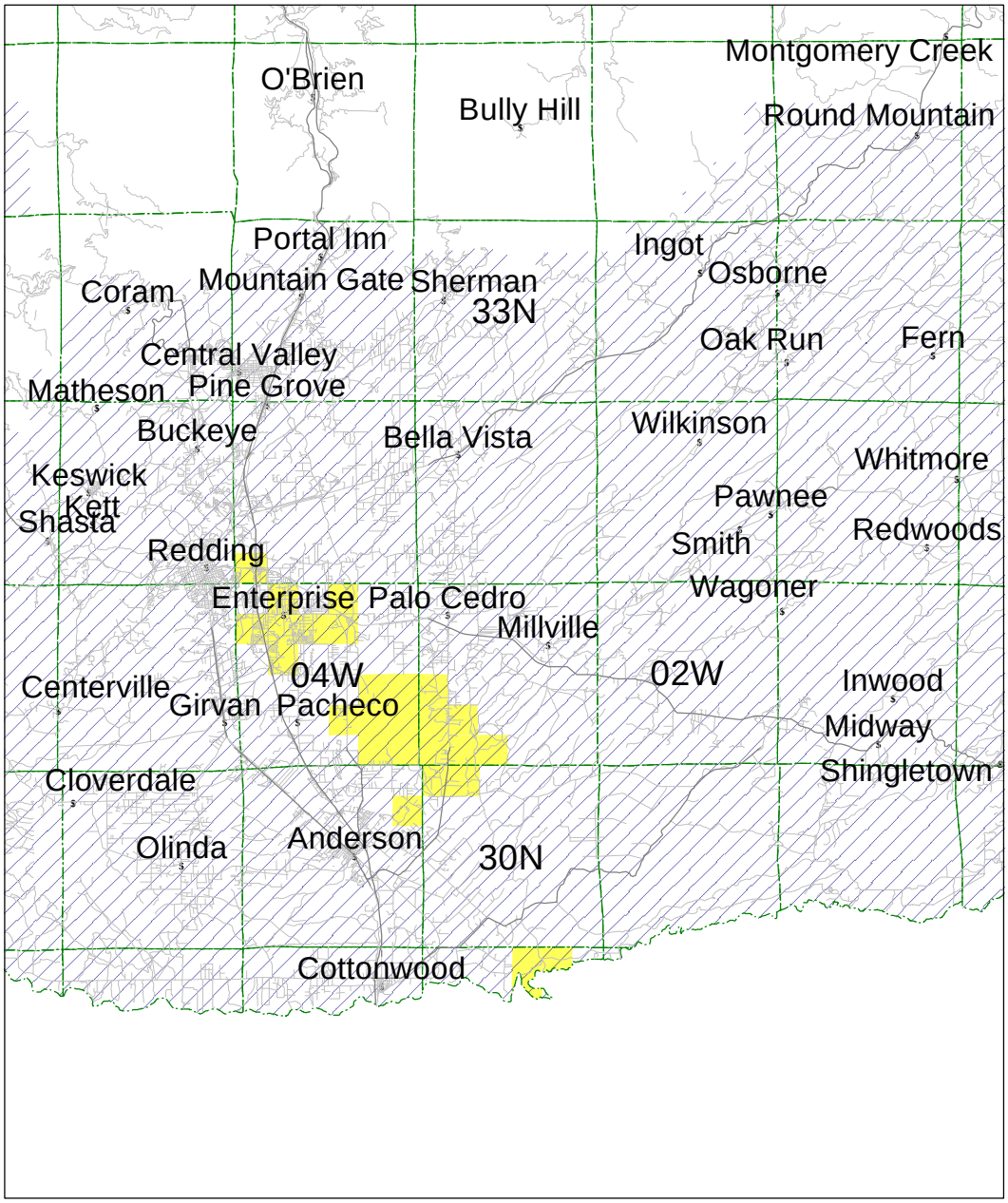
Distribution of Species Addressed in This Bulletin



Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map A

Distribution of Species Addressed in This Bulletin

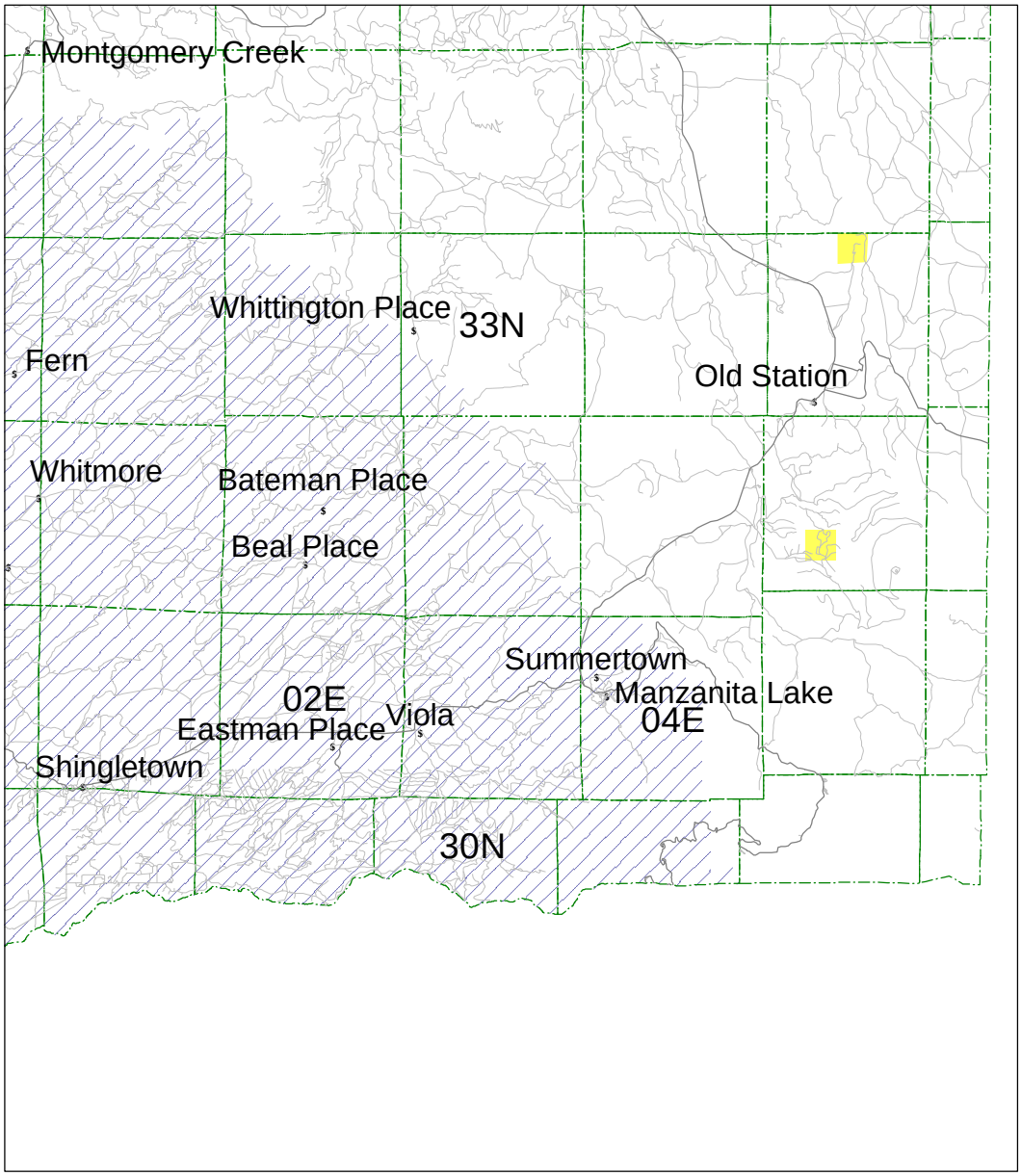


Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map B

Distribution of Species Addressed in This Bulletin

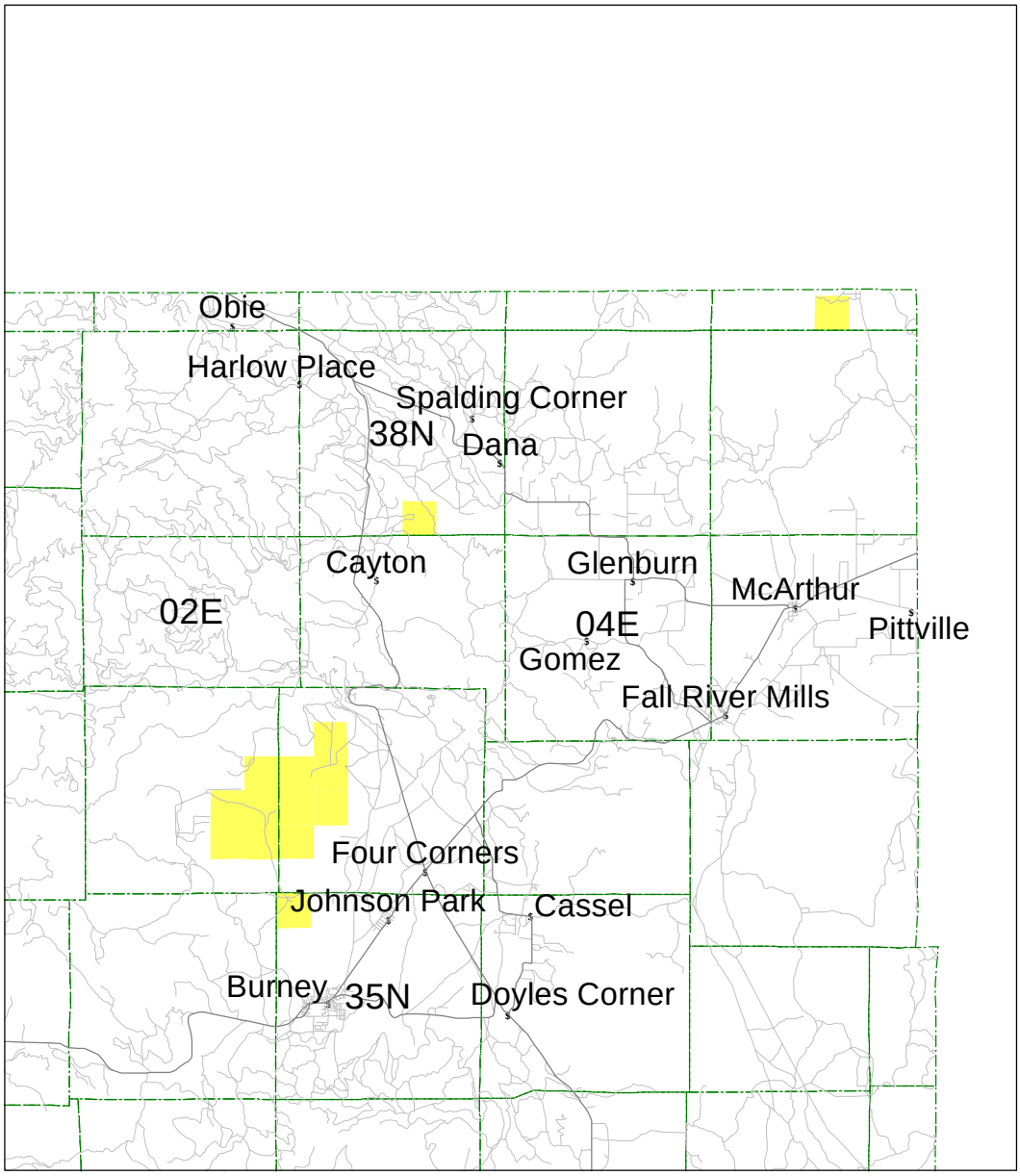


Terrestrial Species

Aquatic Species (restrictions apply only to aquatic habitats and flowing waters within species distribution- refer to the habitat descriptors in the bulletin for further information)

Detail Map C

Distribution of Species Addressed in This Bulletin



Detail Map D

Worksheet for Herbicides

For each section where you will apply herbicides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes ( ) No ( )
   (if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)

2. Is the section listed in the Section List (p 39)? Yes ( ) No ( )
   (if yes, go on to #3, if no, this bulletin does not apply)

3. Is the active ingredient of the herbicide(s) you intend to use listed in the Active Ingredients table (p 10-13)?
   (if yes, go on to #4, if no, this bulletin does not apply) Yes ( ) No ( )

4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

herbicide active ingredient(s) (list each)	Hazard Class (check all that apply)			Activity Category (check one)				
	AQ	PD	PM	a	b	c	d	e
_____	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 34) and check all that apply.

AQ	PD	PM
( )	( )	( )

6. Does one or more hazard class(es) of the herbicide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes ( ) No ( )

7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each pesticide that you intend to use and check all use limitation codes that apply.

Limitation Codes

11 ( ) 15 ( ) 16 ( ) 17 ( ) 19 ( )

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 29). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (p 34) for each species.

Active Ingredients Tables

Active ingredients of pesticides covered by this bulletin are listed in separate tables on the following pages by classification as herbicides, insecticides, fungicides or rodenticides. The active ingredients table for each pesticide class specifies the activity category of each active ingredient and one or more hazard classes that are subsequently used to determine appropriate pesticide use limitations.

Herbicide Exposure Categories

Herbicides are grouped by activity categories (a-e) that broadly define mode of action and use patterns that in turn determine potential routes of exposure to listed species. The activity category of an herbicide is the exposure component that is used with the hazard class of the pesticide and the taxonomic group of the species to define which pesticide use limitations (if any) to apply.

Activity Category	Description
a	Broad spectrum foliar active herbicides with systemic or contact activity and without pre-emergent or residual soil activity.
b	Herbicides with foliar activity on broadleaved plants (dicots) only.
c	Herbicides with foliar activity on grasses (monocots) only.
d	Broad spectrum herbicides with residual soil activity.
e	Broad spectrum, seedling stage, pre-emergent herbicides.

Active Ingredients (Herbicides)

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals (AQ)	Plants	
			Dicot (PD)	Monocot* (PM)
2,4-D	b		X	
2,4-D, butoxyethanol ester	b	X	X	
2,4-D, dimethylamine salt	b		X	
2-(2,4-DP), dimethylamine salt	b		X	
4(2,4-DB), dimethylamine salt	b		X	
alachlor	d		X	X
atrazine	d		X	X
benefin	e	X	X	X
bensulfuron methyl	d		X	X
bensulide	d		X	X
bentazon, sodium salt	a		X	X
bromacil	d		X	X
bromoxynil	a	X	X	X
butylate	d		X	X
cacodylic acid	a		X	X
carfentrazon-ethyl	a		X	X
chlorsulfuron	d		X	
chlorthal-dimethyl	e		X	X
clethodim	c			X
clopyralid	b		X	
copper	a	X		
copper ethanolamine complex	a	X		

* and gymnosperms

Active Ingredients (Herbicides)

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals	Plants	
			Dicot	Monocot*
copper sulfate (basic)	a	X		
copper sulfate pentahydrate	a	X		
cyanazine	d		X	X
cycloate	d		X	X
desmedipham	e		X	X
dicamba, dimethylamine salt	b		X	
dichlobenil	d		X	X
diclofop-methyl	c	X		X
difenzoquat methyl sulfate	a			X
diquat dibromide	a		X	X
dithiopyr	d	X	X	X
diuron	d		X	X
endothall, dipotassium salt	d		X	X
endothall, mono [N,N-dimethyl alkylamine] salt	d		X	X
EPTC	d		X	X
ethafluralin	e	X	X	X
ethofumesate	d		X	X
fenoxaprop	c			X
fluazifop-butyl	c			X
glufosinate	a		X	X
halosulfuron	d		X	X
imazethapyr	d		X	X
isoxaben	d		X	X

* and gymnosperms

Active Ingredients (Herbicides)

Active Ingredients	Activity Category	Hazard Class		
		Aquatic Animals (AQ)	Plants	
			Dicot (PD)	Monocot* (PM)
glyphosate, isopropylamine salt	a		X	X
glyphosate, monoammonium salt	a		X	X
hexazinone	d		X	X
imazapyr	d		X	X
linuron	d		X	X
MCPA, dimethylamine salt	b		X	
MCPP, dimethylamine salt	b		X	
metalochlor	d		X	X
metam-sodium	d	X	X	X
metribuzin	d		X	X
molinate	d		X	X
MSMA	a		X	X
napropamide	d		X	X
nicosulfuron	a		X	X
nonanoic acid	a		X	X
norflurazon	d		X	X
oryzalin	e		X	X
oxadiazon	e	X	X	X
oxyfluorfen	e	X	X	X
paraquat dichloride	a		X	X
pebulate	e		X	X

* and gymnosperms

Active Ingredients (Herbicides)

Active Ingredients	Activity Category	Hazard Class		
			Plants	
		Aquatic Animals (AQ)	Dicot (PD)	Monocot* (PM)
pendimethalin	e	X	X	X
petroleum hydrocarbons	a		X	X
petroleum oil, unclassified	a		X	X
phenmedipham	b		X	
prometon	d		X	X
prometryn	d		X	
pronamide	d		X	X
propanil	a		X	X
pyrazon	d		X	X
pyrithiobac	b		X	
rimsulfuron	d		X	X
sethoxydim	c			X
simazine	d		X	X
sulfometuron, methyl	d		X	X
tebuthiuron	d		X	X
thiazopyr	d		X	X
thiobencarb	a		X	X
triclopyr, butoxyethyl ester	b	X	X	
triclopyr, triethylamine salt	b		X	
trifluralin	e	X	X	X

* and gymnosperms

Limitation Codes (Herbicides)

The following table identifies use limitation codes for each combination of hazard class (AQ, PM or PD) and herbicide activity category (a-e). Use the hazard class row(s) that corresponds with both (1) the pesticide (from the Active Ingredients table) and (2) the hazard class (taxonomic group) of the species in the section to be treated (as found in the Species Descriptions table) and the activity category column(s) that corresponds with the herbicide(s) you intend to use. If either (1) the hazard class (taxonomic group) of one or more species does not match at least one of the hazard class(es) of the herbicide you intend to use or (2) if the combination of activity category and hazard class results in a double dash (- -), then no use limitations apply. Note all applicable codes (11-19). These codes are translated in the Use Limitations table (p 29)

Hazard Class	**Herbicide Activity Category**				
	a	**b**	**c**	**d**	**e**
AQ	11, 17	11, 17	11, 17	11, 15, 16, 17	11, 17
PM	11, 17	- -	11, 17	11, 16, 17, 19	11
PD	11, 17	11, 17	- -	11, 16, 17, 19	11

Worksheet for Insecticides

For each section where you will apply insecticides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes ( ) No ( )
   (if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)

2. Is the section listed in the Section List (p 39)? Yes ( ) No ( )
   (if yes, go on to #3, if no, this bulletin does not apply)

3. Is the active ingredient of the insecticide(s) you intend to use listed in the Active Ingredients table (p 17-18)?
   (if yes, go on to #4, if no, this bulletin does not apply) Yes ( ) No ( )

4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

insecticide active ingredient(s) (list each)	Hazard Class (check all that apply)				Activity Category
	AQ	AV	IN	PD	i
_____	( )	( )	( )	( )	(x)
_____	( )	( )	( )	( )	(x)
_____	( )	( )	( )	( )	(x)
_____	( )	( )	( )	( )	(x)
_____	( )	( )	( )	( )	(x)

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 34) and check all that apply.

AQ	AV	IN	PD
( )	( )	( )	( )

6. Does one or more toxicity class of the insecticide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes ( ) No ( )

7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each insecticide that you intend to use and check all use limitation codes that apply.

Limitation Codes

10 ( ) 15 ( ) 16 ( ) 17 ( )

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 29).
   If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (p 34) for each species.

Activity Categories of Insecticides

There is currently only one activity category for insecticides.

Activity Category	Description
i	Insecticides applied by any method

Active Ingredients (Insecticides)

Active Ingredients	Activity Category	Hazard Class			
		Aquatic (AQ)	Avian (AV)	Insects (IN)	Plants-Dicot* (PD)
acephate	i			X	X
aldicarb	i	X	X		
amitraz	i	X		X	
avermectin	i	X		X	X
azinphos-methyl	i	X	X	X	X
Bacillus thuringiensis	i			X**	
bendiocarb	i	X	X	X	X
bifenthrin	i	X		X	X
buprofezin	i	X		X	X
carbaryl	i	X		X	X***
carbofuran	i	X	X	X	X
carbophenothion	i	X	X	X	X
chlorfenapyr	i	X		X	X
chlorpyrifos	i	X	X	X	X
cyfluthrin	i	X		X	X
cypermethrin	i	X		X	X
cyromazine `	i			X	X
diazinon	i	X	X	X	X
dicofol	i	X	X	X	X
dicrotophos	i	X	X	X	X
diflubenzuron	i	X	X	X	
disulfoton	i	X	X	X	X
endosulfan	i	X	X	X	X
esfenvalerate	i	X		X	X
ethion	i	X		X	
ethoprop	i	X	X	X	X
fenitrothion	i	X	X	X	X

* Non-granular formulations, only when in bloom, to avoid possible adverse impacts on pollination.
** Different strains of Bacillus thuringiensis are selective for different insects. Most strains target Lepidopterous pests only. See your county agricultural commissioner for details.
*** Except XLR formulation.

Active Ingredients (Insecticides)

Active Ingredients	Activity Category	Hazard Class			
		Aquatic (AQ)	Avian (AV)	Insects (IN)	Plants-Dicot* (PD)
fenpropathrin	i	X		X	X
fenthion (livestock use)	i	X	X		
fenvalerate	i	X		X	X
fluvalinate	i	X		X	X
fonofos	i	X	X	X	X
imidacloprid	i			X	X
malathion	i	X		X	X
methamidophos	i		X	X	X
methidathion	i	X	X	X	X
methiocarb	i		X		X
methomyl	i	X	X	X	X
methyl parathion	i	X	X	X	X
mevinphos	i	X	X		X
naled	i	X		X	X
oxamyl	i	X	X	X	X
oxydemeton-methyl	i	X	X	X	X
parathion	i	X	X	X	X
permethrin	i	X		X	X
phorate	i	X	X	X	X
phosmet	i	X		X	X
profenphos	i	X		X	X
propargite	i	X		X	
pyrethrin	i	X		X	X
pyriproxyfen	i	X		X	
spinosad	i			X	X
tebufenozide	i	X		X	X
temephos	i	X	X	X	X
terbufos	i	X	X	X	X
thiodicarb (1)	i	X		X	X
tralomethrin (1)	i	X		X	X
trichlorfon (2)	i	X		X	

Use Limitation Codes for Insecticides

The following table identifies use limitation codes for each combination of toxicity class (AQ, AV or IN) and activity category (i). Use the hazard class row that corresponds with the taxonomic group(s) of species in the section to be treated. Note all applicable codes (11-17). The double dash (- -) indicates that no use limitations apply. These codes are translated in the Use Limitations table (p 29).

Hazard Class	Fungicide Activity Category
	i
AQ	10, 15, 16, 17
AV	10, 17
IN	10, 17
PD	10

Worksheet for Fungicides

For each section where you will apply fungicides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes ( ) No ( )
   (if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)

2. Is the section listed in the Section List (p 39)? Yes ( ) No ( )
   (if yes, go on to #3, if no, this bulletin does not apply)

3. Is the active ingredient of the fungicide(s) you intend to use listed in the Active Ingredients table (p 21)?
   (if yes, go on to #4, if no, this bulletin does not apply) Yes ( ) No ( )

4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

fungicide active ingredient(s) (list each)	Hazard Class	Activity Category
	AQ	f
_____	(x)	(x)
_____	(x)	(x)
_____	(x)	(x)
_____	(x)	(x)
_____	(x)	(x)

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 34) and check all that apply.

   AQ
   (x)

6. Does one or more hazard class of the fungicide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes ( ) No ( )

7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each fungicide that you intend to use and check all use limitation codes that apply.

   Limitation Codes

   10 (x) 15 (x) 16 (x) 17 (x)

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 29). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions (p 34) table for each species.

Active Ingredients (Fungicides)

Active Ingredients	Activity Category	Hazard Class
		Aquatic (AQ)
Azoxystrobin	f	X
Benomyl	f	X
Captan	f	X
Carboxin	f	X
Chlorothalonil	f	X
Copper	f	X
Copper Ammonium Carbonate	f	X
Copper Ammonium Complex	f	X
Copper Hydroxide	f	X
Copper Octanoate	f	X
Copper Oxychloride	f	X
Copper Oxychloride Sulfate	f	X
Copper Salts of Fatty and Rosin Acids	f	X
Copper Sulfate (Basic)	f	X
Copper Sulfate (Pentahydrate)	f	X
Dazomet	f	X
Difenoconazole	f	X
Dimethomorph	f	X
Fenbuconazole	f	X
Fludioxonil	f	X
Mancozeb	f	X
Maneb	f	X
Manganese Sulfate	f	X
Oxythioquinox	f	X
PCNB	f	X
Piperalin	f	X
Propiconazole	f	X
Tebuconazole	f	X
Thiabendazole	f	X
Thiram	f	X
Triflumizole	f	X
Ziram	f	X
Zineb	f	X

Use Limitation Codes for Fungicides

The following table identifies use limitation codes for the hazard class (AQ) and fungicide activity category (f). Note all applicable codes (10-17). These codes are translated on page 29.

Hazard Class	Insecticide Activity Category
	f
AQ	10, 15, 16, 17

Worksheet for Grain Bait Rodenticides

For each section where you will apply grain bait rodenticides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes ( ) No ( )
   (if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)

2. Is the section listed in the Section List (p 39)? Yes ( ) No ( )
   (if yes, go on to #3, if no, this bulletin does not apply)

3. Is the active ingredient of the pesticide(s) you intend to use listed in the Active Ingredients table (p 24)?
   (if yes, go on to #4, if no, this bulletin does not apply) Yes ( ) No ( )

4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

Rodenticide active ingredient(s) (list each)	Hazard Class							Activity Category		
	BB	CB	GB	HM	KF	KR	LH	g	h	k
_____	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
_____	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 34) and check all that apply.

BB	CB	GB	HM	KF	KR	LH
( )	( )	( )	( )	( )	( )	( )

6. Does one or more hazard class of the pesticide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes ( ) No ( )

7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each pesticide that you intend to use and check all use limitation codes that apply.

Limitation Codes

1A ( )	1B ( )	1C ( )	1D ( )	2 ( )	3 ( )
4 ( )	7 ( )	8 ( )	33 ( )	34 ( )	

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 29). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (page 34) for each species.

Active Ingredients (Rodenticides)

Active Ingredients	Activity Category	Hazard Class						
		Bait Box (BB)	Carni-vorous Birds (CB)	Grani-vorous Birds (GB)	Salt Marsh Harvest Mouse (HM)	Kit Fox (KF)	Kangaroo Rats (KR)	Very Limited Habitat (LH)
Brodifacoum	k	X	X	X	X	X	X	X
Bromadiolone	k	X	X	X	X	X	X	X
Bromethalin	k	X	X	X	X	X	X	X
Chlorophacinone	g	X	X	X	X	X	X	X
Difenacoum	k	X	X	X	X	X	X	X
Difethialone	k	X	X	X	X	X	X	X
Diphacinone	g	X	X	X	X	X	X	X
Pival	k	X	X	X	X	X	X	X
Vitamin D3	k	X	X	X	X	X	X	X
Warfarin	k	X	X	X	X	X	X	X
Zinc Phosphide	h	X	X	X	X	X	X	X

Activity Categories of Grain Bait Rodenticides

Activity Category	Description
g	Field use chronic toxicant grain bait
h	Field use acute toxicant grain bait
k	Structural use rodenticide

Use Limitation Codes for Rodenticide Grain Baits

The following table identifies use limitation codes for each combination of hazard class (BB, CB, etc.) and rodenticide activity category (g-k). Use the row(s) that corresponds with the hazard class (taxonomic group) of the species in the section to be treated and the rodenticide activity column(s) that corresponds with the rodenticide(s) you intend to use. Note all applicable codes (1-34). The double dash (- -) indicates that no use limitations apply. These codes are translated in the Use Limitations table (p 29)

Hazard Class	Rodenticide Grain Bait Activity Category		
	g	**h**	**k**
BB	7	7	7
CB	1D	- -	7
GB	1B, 1C	1B, 1C	7
HM	7 or 34	7 or 34	7
KF	1, 2, 3, 4	3	7
KR	8	8	7
LH	33	33	33

Worksheet for Fumigant Rodenticides

For each section where you will apply fumigant rodenticides:

1. Is the section inside of the shaded area on the county map (p 3)? Yes ( ) No ( )
   (if yes, or if you are unsure go on to #2, if no, this bulletin does not apply)

2. Is the section listed in the Section List (p 39)? Yes ( ) No ( )
   (if yes, go on to #3, if no, this bulletin does not apply)

3. Is the active ingredient of the pesticide(s) you intend to use listed in the Active Ingredients table (p 27)?
   (if yes, go on to #4, if no, this bulletin does not apply) Yes ( ) No ( )

4. For each active ingredient, note the hazard class and activity category (from the Active Ingredients table).

Rodenticide active ingredient(s) (list each)	Hazard Class					Activity Category
	S1	S2	LH	WW	FS	j
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)
_____	(x)	(x)	(x)	(x)	(x)	(x)

5. For each species in the section to be treated, look up the hazard class (taxonomic group) in the Species Descriptions table (p 34) and check all that apply.

S1	S2	LH	WW	FS
( )	( )	( )	( )	( )

6. Does one or more hazard class of the pesticide(s) from #4 match the hazard class (taxonomic group) for any of the species from #5? (if yes to any, go on to #7, if no, this bulletin does not apply) Yes ( ) No ( )

7. Look up the use limitation codes by hazard class and activity category in the Use Limitation Codes table in this section for each pesticide that you intend to use and check all use limitation codes that apply.

Limitation Codes

5 ( ) 30 ( ) 31 ( ) 32 ( ) 33 ( )

8. Follow the use limitations corresponding to each code as shown in the Use Limitations table (p 29). If more than one code applies and there is a conflict, follow the most restrictive limitation. Note that use limits apply only to sites that that match or (where buffer zones apply) are adjacent to sites that match the habitat descriptions in the Species Descriptions table (p 34) for each species.

Active Ingredients (Rodenticides - Burrow Fumigants)

Active Ingredients	Activity Category	Hazard Class				
		Seasonal Limitation 1 (S1)	Seasonal Limitation 2 (S2)	Limited Habitat (LH)	Waterways (WW)	Fossorial (Burrowing) Species (FS)
Acrolein	j	X	X	X	X	X
Aluminum phosphide	j	X	X	X	X	X
Magnesium phosphide	j	X	X	X	X	X
Sodium Nitrate	j	X	X	X	X	X
Potassium Nitrate	j	X	X	X	X	X

Activity Categories of Burrow Fumigant Rodenticides

Activity Category	Description
j	Burrow Fumigants

Use Limitation Codes for Fumigant Rodenticides

The following table identifies use limitation codes for each combination of hazard class (S1, S2, etc.) and fumigant rodenticide activity category (j). Use the hazard class row(s) that corresponds with the hazard class of the species (taxonomic group) in the section to be treated and the herbicide activity column(s) that corresponds with the fumigant(s) you intend to use. Note all applicable codes (5-32). These codes are translated in the Use Limitations table (p 29).

Hazard Class	Fumigant Rodenticide Activity Category
	j
S1	31, 5
S2	32, 5
LH	33
WW	30
FS	5

Use Limitations

1A	**Bait station application**s: ***Formulation:*** The active ingredient shall not exceed 0.005% in the formulated bait.
1B	***Bait Station Design and Use:*** Bait stations shall be designed with an opening that prevents access to non-target species (not to exceed 3") and controls bait spillage by feeding rodents. See your county agricultural commissioner for recommended designs and suggestions to retrofit existing stations. Bait stations shall be secured (e.g. staked) upright to prevent tipping and access by non-target animals. Bait stations shall not be filled beyond design capacity and in no case shall bait stations be filled with more than 10 lbs of bait.
1C	***Station Monitoring:*** While treated baits are in use, bait stations shall be inspected for spillage, evidence of disturbance by non-target animals, excess moisture from irrigation systems, etc. Problems shall be corrected before baiting is resumed. Any spilled baits shall be promptly cleaned up (scattering limitied quantities of spilled bait in non-crop areas is acceptable if allowed by labeling). Bait stations shall be replenished with treated baits as needed to provide continuous exposure. After treated baits are accepted, as evidenced by consumption of baits, depletion of bait in the bait station shall be inspected at least weekly for depletion of bait and refilled until feeding ceases. Treated baits shall be promptly removed (or bait stations shall be sealed) from all stations after feeding has ceased. If subsequent baiting is needed, a two week period without use of treated baits shall be observed before baiting is resumed. This is to keep the period when treated bait is exposed to a minimum without jeopardizing good pest control.
1D	***Carcass Survey and Disposal:*** Carcass survey and disposal shall be performed in the treated area beginning on the third day following the initial exposure of toxic baits. Any exposed carcasses shall be disposed of (e.g., completely buried) in a manner inaccessible to wildlife. Carcass surveys shall continue for at least 5 days after toxic baiting has ceased and thereafter until no more carcasses are found. Carcasses should be handled with care to avoid contact with parasites such as fleas.
1E	***Pre-baiting (optional):*** Pre-baiting of bait stations with non-toxic (untreated) grains such as oats, oat groats or barley is optional, but may reduce the time period for carcass surveys. Pre-baiting will acclimate the pest species to feed in bait stations and should be continued until most of the target population is feeding from the stations. The period of toxic bait exposure may be shortened as will the period when pest carcasses may be exposed. The untreated grain need not be the same as the treated grain, but milo or cracked corn **should be strictly avoided** due to their attractiveness to birds.

Use Limitations

2A	**Broadcast (mechanical) and spot (hand) applications** ***Formulation:*** The active ingredient shall not exceed 0.01% in the formulated bait.
2B	***Test Baiting/Bait Acceptanc***e: Prior to the main application of toxic baits by spot or broadcast method, a small amount of the bait shall be applied to determine bait accep-tance Test baits shall be broadcast by the same method that will be used for control baiting.
2C	***Use of Treated Bait***s: Use of treated baits shall begin only when bait acceptance is confirmed by consumption of test baits. Piling of baits shall be avoided. No addi-tional applications shall be made whenever significant quantities of previously applied bait remain. Do not place baits directly into burrows. Do not exceed label application rates. **Spot Baiting** - Scatter a handful of bait (about 10 handfulls per pound) evenly over 40 to 50 square feet near active burrows or runways. Repeat every other day until feeding ceases. **Mechanical Spreader** - Apply at the rate of 10 pounds per swath acre through infested area. Follow with a second application in 2 to 3 days.
2D	***Carcass Survey and Disposal:*** See Limitation Code 1D.
3	Use of pelletized formulations for control of ground squirrels is prohibited, except in bait stations as described in Limitation Code 1 (A, B, C, E).
4	Jackrabbits may be controlled by using self-dispensing bait stations provided that: Bait acceptance is first determined. Carcasses are removed and stations are monitored as described in Limitation Codes 1C and 1D respectively. Baiting ceases when feeding stops. Baits are placed only where jackrabbits are active. Use of pelletized baits is prohibited.

Use Limitations

5	Use shall be supervised by a person (wildlife biologist, county agricultural commissioner, university extension advisor,state or federal official or others)who is trained to distinguish dens and burrows of target species from those of non-target species. Use shall occur only in the active burrows of target species. The person responsible for supervision shall be aware of the conditions at the site of application and be available to direct and control the manner in which applications are made (per Section 6406 of Title 3, California Code of Regulations). Contact your county agricultural commissioner for information on training.
7	For commensal rodent control, outdoor use must be in tamper resistant bait boxes placed in areas inaccessible to wildlife.
8	Use is prohibited EXCEPT under any ONE of the following conditions (in all cases where toxic baits are applied, any spilled baits shall be immediately removed or buried to prevent exposure to non-target species): For commensal rodent control, outdoor use must be in tamper resistant bait boxes placed in areas inaccessible to wildlife. An approved bait station (see yourcounty agricultural commissioner for approved designs) is used that is fitted with an entrance that provides selective access to pest species but does not allow access to kangaroo rats, OR Bait is placed only in bait stations that are elevated to preclude exposure to kangaroo rats, and designed to prevent spillage by rodents feeding (see your county agricultural commissioner for specifications), OR Baits are placed in bait stationsduring daylight hours only and are removed (or entrances are closed) by dusk each day, OR Broadcast application of baits is allowed in fields under active cultivation with the maintenance of a 10 yard wide border of untreated crops where fields are adjacent to areas of natural vegetation. For purposes of this provision, fields under active cultivation means fields that have been tilled within the last one year or that such fields are irrigated by furrow, flood or overlapping sprinkler method.
10	Do not use in currently occupied habitat (see Species Descriptions table for possible exceptions).

Use Limitations

Code	Limitation
11	Do not use in currently occupied habitat except: (1) as specified in Habitat Descriptors, (2) in organized habitat recovery programs, or (3) for selective control of invasive exotic plants.
15	Provide a 20 foot minimum strip of vegetation (on which pesticides should not be applied) along rivers, creeks, streams, wetlands, vernal pools and stock ponds or on the downhill side of fields where run-off could occur. Prepare land around fields to contain run-off by proper leveling, etc. Contain as much water "on-site" as possible. The planting of legumes, or other cover crops for several rows adjacent to off-target water sites is recommended. Mix pesticides in areas not prone to run-off such as concrete mixing/loading pads, disked soil in flat terrain or graveled mix pads, or use a suitable method to contain spills and/or rinsate. Properly empty and triple-rinse pesticide containers at time of use.
16	Conduct irrigations efficiently to prevent excessive loss of irrigation waters through run-off. Schedule irrigations and pesticide applications to maximize the interval of time between the pesticide application and the first subsequent irrigation. Allow at least 24 hours between application of pesticides listed in this bulletin and any irrigation that results in surface run-off into natural waters. Time applications to allow sprays to dry prior to rain or sprinkler irrigations. Do not make aerial applications while irrigation water is on the field unless surface run-off is contained for 72 hours following the application.
17	For sprayable or dust formulations: when the air is calm or moving away from habitat, commence applications on the side nearest the habitat and proceed away from the habitat. When air currents are moving toward habitat, do not make applications within 200 yards by air or 40 yards by ground upwind from occupied habitat. The county agricultural commissioner may reduce or waive buffer zones following a site inspection, if there is an adequate hedgerow, windbreak, riparian corridor or other physical barrier that substantially reduces the probability of drift.
19	Do not apply within 30 yards upslope of habitat unless a suitable method is used to contain or divert runoff waters.

Use Limitations

30	Use is prohibited within 500 feet of water courses at any time, EXCEPT a) in cultivated areas
31	Use is prohibited from October 1 through April 30, EXCEPT: a) in cultivated areas, or b) on the water side of water supply channels
32	Use is prohibited from July 1 through February 28, EXCEPT: a) in cultivated areas, or b) on the water side of water supply channels.
33	Use is prohibited EXCEPT with a prior site evaluation by the county agricultural commissioner in cooperation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.
34	For commensal rodent control, outdoor use near salt marshes is limited to sites that are separated by at least 10 yards of barren (or clean cultivated) ground from pickleweed habitat or from the inland side of the levee. This buffer strip should be above the high tide line.

Species Descriptions

CHINOOK SALMON (CC-ESU)

Scientific Name: *ONCORHYNCHUS TSHAWYTSCHA*

Federal Status: Threatened

Species Description:

Chinook are largest of the salmon, adults often exceed 40 pounds. They use a variety of freshwater habitats, but it is more common to see them spawn in larger mainstem rivers than other salmon species.

Photo: NMFS

Habitat Description:

INCLUDES NATURALLY SPAWNED SPRING AND FALL CHINOOK IN COASTAL STREAMS FROM REDWOOD CREEK (HUM. CO.) SOUTH TO THE RUSSIAN RIVER

Hazard Class: **AQ**

CHINOOK SALMON (CVSR-ESU)

Scientific Name: *ONCORHYNCHUS TSHAWYTSCHA*

Federal Status: Threatened

Species Description:

Chinook are largest of the salmon, adults often exceed 40 pounds. They use a variety of freshwater habitats, but it is more common to see them spawn in larger mainstem rivers than other salmon species.

Photo: NMFS

Habitat Description:

INCLUDES NATURALLY SPAWNED SPRING RUN CHINOOK IN THE CENTRAL VALLEY.

Hazard Class: **AQ**

Species Descriptions

CHINOOK SALMON (SRWR-ESU)

Scientific Name: *ONCORHYNCHUS TSHAWYTSCHA*

Federal Status: Threatened

Species Description:

Chinook are largest of the salmon, adults often exceed 40 pounds. They use a variety of freshwater habitats, but it is more common to see them spawn in larger mainstem rivers than other salmon species.

Photo: NMFS

Habitat Description:

OCCURS IN THE SACRAMENTO RIVER BELOW IMPASSABLE BARRIERS, ENTERS THE RIVER NOVEMBER TO JUNE AND SPAWNS FROM LATE APRIL TO MID-AUGUST.

Hazard Class: AQ

COHO SALMON (SO/NC-ESU)

Scientific Name: *ONCORHYNCHUS KISUTCH*

Federal Status: Threatened

Species Description:

Spawning occurs in mid-winter; eggs incubate up to 4 months; juveniles remain in freshwater up to 15 months.

Photo: NMFS

Habitat Description:

Once inhabited most coastal streams in northern and central California, currently protected from the Oregon border to the San Lorenzo River (Santa Cruz Co.)

Hazard Class: AQ

Species Descriptions

SLENDER ORCUTT GRASS

Scientific Name: *ORCUTTIA TENUIS*

Federal Status: Threatened

Species Description:

A weakly-tufted annual grass to 6 in with elongate flowering head.

Photo: Craig Martz

Habitat Description:

30-1735M. VERNAL POOLS.

Hazard Class: **PD**

STEELHEAD TROUT (CCV-ESU)

Scientific Name: *ONCHORYNCHUS MYKISS*

Federal Status: Threatened

Species Description:

A genetically distinct and evolutionarily significant anadromous or freshwater fish related to rainbow and cutthroat trout.

Photo: NMFS

Habitat Description:

COASTAL STREAMS

Hazard Class: **AQ**

Species Descriptions

VALLEY ELDERBERRY LONGHORN BEETLE

Scientific Name: *DESMOCERUS CALIFORNICUS DIMORPHUS*

Federal Status: Threatened

Species Description:

Adults to 3/4-inch long, forewings on females dark metallic green with flame trimmings, males similar or red-black with dark green spots and prominent segemented antennae, appearing from elderberry bloom until June.

Photo: Richard A. Arnold

Habitat Description:

PREFERS TO LAY EGGS IN ELDERBERRRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES. OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).

Hazard Class: IN

VERNAL POOL FAIRY SHRIMP

Scientific Name: *BRANCHINECTA LYNCHI*

Federal Status: Threatened

Species Description:

1/2 to 1-1/2 inch crustaceans swimming upside down (ventral side up), adults have stalked compound eyes, two sets of antennae, and 11 pairs of leaf-like swimming legs. Coloration varies widely from orange to red, blue, gray or green due to food source.

Photo: Brent Helm, Jones & Stokes

Habitat Description:

INHABIT SMALL, CLEAR-WATER SANDSTONE-DEPRESSION POOLS AND GRASSED SWALE, EARTH SLUMP, OR BASALT-FLOW DEPRESSION POOLS. ENDEMIC TO THE GRASSLANDS OF THE CENTRAL VALLEY, CENTRAL COAST MTNS, AND SOUTH COAST MTNS, IN ASTATIC RAIN-FILLED POOLS.

Hazard Class: AQ

VERNAL POOL TADPOLE SHRIMP

Photo: Brent Helm, Jones & Stokes

Scientific Name: *LEPIDURUS PACKARDI*

Federal Status: Endangered

Species Description:

A crustacean to 2 inches in length, having 35 pairs of legs and distinguished from the superficially similar ricefield tadpole shrimp in possessing a flat paddle-shaped supra-anal plate.

Habitat Description:

POOLS COMMONLY FOUND IN GRASS BOTTOMED SWALES OF UNPLOWED GRASSLANDS. SOME POOLS ARE MUD-BOTTOMED & HIGHLY TURBID. INHABITS VERNAL POOLS AND SWALES IN THE SACRAMENTO VALLEY CONTAINING CLEAR TO HIGHLY TURBID WATER.

Hazard Class: **AQ**

Section List - Shasta County

Sections	Species
28N09W: S5-6	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
28N10W: S1-7	Steelhead Trout (CCV-ESU)
28N11W: S1	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
28N11W: S12	Steelhead Trout (CCV-ESU)
28N11W: S2,11	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
29N02W: S6	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N03W: S1	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N03W: S10	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
29N03W: S11	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N03W: S2	Chinook Salmon (SRWR-ESU), Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
29N03W: S3	Chinook Salmon (SRWR-ESU), Slender Orcutt Grass, Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
29N03W: S4-5	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N03W: S6	Steelhead Trout (CCV-ESU)
29N03W: S7-9	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N04W: S1-6	Steelhead Trout (CCV-ESU)
29N04W: S7-12,15-18	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N05W: S1-5	Steelhead Trout (CCV-ESU)
29N05W: S6-17	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N06W: S1-3	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N06W: S4-6	Steelhead Trout (CCV-ESU)
29N06W: S7-12,16-19	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N07W: S1-12	Steelhead Trout (CCV-ESU)
29N07W: S13	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N07W: S14-18	Steelhead Trout (CCV-ESU)
29N07W: S19-20	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N07W: S21	Steelhead Trout (CCV-ESU)
29N07W: S22-24,26-30,32-34	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N08W: S1-21	Steelhead Trout (CCV-ESU)
29N08W: S23-24	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N09W: S1-20	Steelhead Trout (CCV-ESU)
29N09W: S21-22	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N09W: S23-24	Steelhead Trout (CCV-ESU)
29N09W: S28-29	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
29N09W: S30-31	Steelhead Trout (CCV-ESU)
29N09W: S32	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
29N10W: S1-3	Steelhead Trout (CCV-ESU)
29N10W: S17	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
29N10W: S18	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
29N10W: S19	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
29N10W: S20-36	Steelhead Trout (CCV-ESU)
29N10W: S4	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
29N10W: S5,8	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
29N10W: S9-16	Steelhead Trout (CCV-ESU)
29N11W: S23-24	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
29N11W: S25	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
29N11W: S26,35	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
29N11W: S36	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
30N01E: S1-3	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N01E: S10	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N01E: S11-14	Steelhead Trout (CCV-ESU)
30N01E: S15-21	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N01E: S22-24	Steelhead Trout (CCV-ESU)
30N01E: S29-30	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N01E: S4-9	Steelhead Trout (CCV-ESU)
30N01W: S1-20	Steelhead Trout (CCV-ESU)
30N01W: S21-30,35	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N02E: S1-5	Steelhead Trout (CCV-ESU)
30N02E: S6	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N02E: S7-24,26-28	Steelhead Trout (CCV-ESU)
30N02W: S1-24	Steelhead Trout (CCV-ESU)
30N02W: S25-28	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N02W: S29-30	Steelhead Trout (CCV-ESU)
30N02W: S31-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N03E: S1-28	Steelhead Trout (CCV-ESU)
30N03W: S1-3	Steelhead Trout (CCV-ESU)
30N03W: S10-14	Steelhead Trout (CCV-ESU)
30N03W: S15-23	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N03W: S24-25	Steelhead Trout (CCV-ESU)
30N03W: S26-30	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
30N03W: S31	Steelhead Trout (CCV-ESU)
30N03W: S32-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N03W: S4	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N03W: S5-6	Chinook Salmon (SRWR-ESU), Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
30N03W: S7-9	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N04E: S2-11,14-24,30	Steelhead Trout (CCV-ESU)
30N04W: S1	Steelhead Trout (CCV-ESU)
30N04W: S12	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
30N04W: S13-16	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N04W: S17-23	Steelhead Trout (CCV-ESU)
30N04W: S2-11	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N04W: S24	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N04W: S25-36	Steelhead Trout (CCV-ESU)
30N05W: S1	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
30N05W: S2-36	Steelhead Trout (CCV-ESU)
30N06W: S1-36	Steelhead Trout (CCV-ESU)
30N07W: S1-36	Steelhead Trout (CCV-ESU)
30N08W: S1-36	Steelhead Trout (CCV-ESU)
30N09W: S1	Steelhead Trout (CCV-ESU)
30N09W: S10-16	Steelhead Trout (CCV-ESU)
30N09W: S17-18	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
30N09W: S19	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
30N09W: S2	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
30N09W: S20-36	Steelhead Trout (CCV-ESU)
30N09W: S3	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
30N09W: S4	Coho Salmon (SO/NC-ESU)
30N09W: S8	Chinook Salmon (CC-ESU)
30N09W: S9	Chinook Salmon (CVSR-ESU), Steelhead Trout (CCV-ESU)
30N10W: S25-26	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
30N10W: S27-28	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
30N10W: S33	Chinook Salmon (CC-ESU)
30N10W: S34-36	Steelhead Trout (CCV-ESU)
31N01E: S1-24	Steelhead Trout (CCV-ESU)
31N01E: S25	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
31N01E: S26-35	Steelhead Trout (CCV-ESU)
31N01E: S36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N01W: S1-36	Steelhead Trout (CCV-ESU)
31N02E: S1-14	Steelhead Trout (CCV-ESU)
31N02E: S15	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N02E: S16-20	Steelhead Trout (CCV-ESU)
31N02E: S21-22	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N02E: S23-27	Steelhead Trout (CCV-ESU)
31N02E: S28-31	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N02E: S32-36	Steelhead Trout (CCV-ESU)
31N02W: S1-36	Steelhead Trout (CCV-ESU)
31N03E: S1-36	Steelhead Trout (CCV-ESU)
31N03W: S1-2	Steelhead Trout (CCV-ESU)
31N03W: S11-15	Steelhead Trout (CCV-ESU)
31N03W: S16-18	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N03W: S19	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N03W: S20-21	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N03W: S22-27	Steelhead Trout (CCV-ESU)
31N03W: S28	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N03W: S29	Chinook Salmon (SRWR-ESU), Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
31N03W: S3-5	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N03W: S30	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N03W: S31	Chinook Salmon (SRWR-ESU), Slender Orcutt Grass, Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N03W: S32-33	Chinook Salmon (SRWR-ESU), Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
31N03W: S34-36	Steelhead Trout (CCV-ESU)
31N03W: S6	Steelhead Trout (CCV-ESU)
31N03W: S7-10	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N04E: S5-9,15-22,27-34	Steelhead Trout (CCV-ESU)
31N04W: S1-2	Steelhead Trout (CCV-ESU)
31N04W: S10	Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
31N04W: S11-16	Steelhead Trout (CCV-ESU)
31N04W: S17	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Vernal Pool Tadpole Shrimp
31N04W: S18-20	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
31N04W: S21-22	Steelhead Trout (CCV-ESU)
31N04W: S23-24	Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N04W: S25	Slender Orcutt Grass, Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N04W: S26	Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N04W: S27	Slender Orcutt Grass, Steelhead Trout (CCV-ESU), Vernal Pool Tadpole Shrimp
31N04W: S28	Steelhead Trout (CCV-ESU)
31N04W: S29-33	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N04W: S3	Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
31N04W: S34	Steelhead Trout (CCV-ESU)
31N04W: S35	Slender Orcutt Grass, Steelhead Trout (CCV-ESU)
31N04W: S36	Slender Orcutt Grass, Steelhead Trout (CCV-ESU), Vernal Pool Fairy Shrimp, Vernal Pool Tadpole Shrimp
31N04W: S4	Steelhead Trout (CCV-ESU)
31N04W: S5	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Vernal Pool Tadpole Shrimp
31N04W: S6	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N04W: S7-8	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Vernal Pool Tadpole Shrimp
31N04W: S9	Steelhead Trout (CCV-ESU), Vernal Pool Tadpole Shrimp
31N05W: S1-4	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N05W: S10-14	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N05W: S15-22	Steelhead Trout (CCV-ESU)
31N05W: S23-27	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N05W: S28-30	Steelhead Trout (CCV-ESU)
31N05W: S31-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
31N05W: S5-9	Steelhead Trout (CCV-ESU)
31N06W: S1-36	Steelhead Trout (CCV-ESU)
31N07W: S1-5	Steelhead Trout (CCV-ESU)
31N07W: S6	Chinook Salmon (CVSR-ESU), Steelhead Trout (CCV-ESU)
31N07W: S7-36	Steelhead Trout (CCV-ESU)
31N08W: S1	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
31N08W: S10-11	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
31N08W: S12-15	Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
31N08W: S16	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
31N08W: S17,20	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
31N08W: S2,9	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
31N08W: S21	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
31N08W: S22-28	Steelhead Trout (CCV-ESU)
31N08W: S29-30	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
31N08W: S31-36	Steelhead Trout (CCV-ESU)
31N09W: S25-26,35	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
31N09W: S36	Steelhead Trout (CCV-ESU)
32N01E: S1-36	Steelhead Trout (CCV-ESU)
32N01W: S1-36	Steelhead Trout (CCV-ESU)
32N02E: S1-36	Steelhead Trout (CCV-ESU)
32N02W: S1-36	Steelhead Trout (CCV-ESU)
32N03E: S4-11,15-23,26-36	Steelhead Trout (CCV-ESU)
32N03W: S1-36	Steelhead Trout (CCV-ESU)
32N04W: S1-29	Steelhead Trout (CCV-ESU)
32N04W: S30	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N04W: S31	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU), Valley Elderberry Longhorn Beetle
32N04W: S32	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N04W: S33-36	Steelhead Trout (CCV-ESU)
32N05E: S28	Slender Orcutt Grass
32N05W: S1-2	Steelhead Trout (CCV-ESU)
32N05W: S10	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N05W: S11-13	Steelhead Trout (CCV-ESU)
32N05W: S14-16	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N05W: S17	Chinook Salmon (SRWR-ESU)
32N05W: S18-30	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N05W: S3	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N05W: S31	Steelhead Trout (CCV-ESU)
32N05W: S32-36	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N05W: S4-9	Chinook Salmon (SRWR-ESU)
32N06W: S1	Chinook Salmon (SRWR-ESU)
32N06W: S12	Chinook Salmon (SRWR-ESU)
32N06W: S13	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N06W: S14-23	Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
32N06W: S24	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
32N06W: S25-36	Steelhead Trout (CCV-ESU)
32N06W: S3-11	Steelhead Trout (CCV-ESU)
32N07W: S1-18	Steelhead Trout (CCV-ESU)
32N07W: S19	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
32N07W: S20-29	Steelhead Trout (CCV-ESU)
32N07W: S30	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
32N07W: S31	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
32N07W: S32-36	Steelhead Trout (CCV-ESU)
32N08W: S1	Steelhead Trout (CCV-ESU)
32N08W: S12-13	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
32N08W: S14,24	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
32N08W: S2,11	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
33N01E: S1-36	Steelhead Trout (CCV-ESU)
33N01W: S1-36	Steelhead Trout (CCV-ESU)
33N02E: S6-9,15-36	Steelhead Trout (CCV-ESU)
33N02W: S1-5,7-36	Steelhead Trout (CCV-ESU)
33N03E: S30-32	Steelhead Trout (CCV-ESU)
33N03W: S7-9,11-36	Steelhead Trout (CCV-ESU)
33N04W: S2-4,7-36	Steelhead Trout (CCV-ESU)
33N05E: S3	Slender Orcutt Grass
33N05W: S13-14	Steelhead Trout (CCV-ESU)
33N05W: S16-17,19-21	Chinook Salmon (SRWR-ESU)
33N05W: S22	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
33N05W: S23-26	Steelhead Trout (CCV-ESU)
33N05W: S27-28	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
33N05W: S29-32	Chinook Salmon (SRWR-ESU)
33N05W: S33-34	Chinook Salmon (SRWR-ESU), Steelhead Trout (CCV-ESU)
33N05W: S35-36	Steelhead Trout (CCV-ESU)
33N06W: S3-9,16-21,28-34	Steelhead Trout (CCV-ESU)
33N06W: S36	Chinook Salmon (SRWR-ESU)
33N07W: S1-6	Steelhead Trout (CCV-ESU)
33N07W: S18	Chinook Salmon (CVSR-ESU), Steelhead Trout (CCV-ESU)
33N07W: S19-36	Steelhead Trout (CCV-ESU)
33N07W: S7	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)

Section List - Shasta County

Sections	Species
33N07W: S8-17	Steelhead Trout (CCV-ESU)
33N08W: S1,12-13,23-24	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
33N08W: S25	Chinook Salmon (CVSR-ESU), Steelhead Trout (CCV-ESU)
33N08W: S26	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
33N08W: S27	Chinook Salmon (CC-ESU), Coho Salmon (SO/NC-ESU)
33N08W: S35	Chinook Salmon (CVSR-ESU), Coho Salmon (SO/NC-ESU), Steelhead Trout (CCV-ESU)
33N08W: S36	Steelhead Trout (CCV-ESU)
34N01E: S13-14,16-36	Steelhead Trout (CCV-ESU)
34N01W: S13-36	Steelhead Trout (CCV-ESU)
34N02E: S30-32	Steelhead Trout (CCV-ESU)
34N02W: S13,24-26,34-36	Steelhead Trout (CCV-ESU)
34N06W: S3-10,14-23,26-35	Steelhead Trout (CCV-ESU)
34N07W: S1-3,10-15,22-28,32-36	Steelhead Trout (CCV-ESU)
35N03E: S6	Slender Orcutt Grass
35N06W: S3-11,14-22,27-34	Steelhead Trout (CCV-ESU)
35N07W: S1,24-26,34-36	Steelhead Trout (CCV-ESU)
36N02E: S13,23-26	Slender Orcutt Grass
36N03E: S8,17-20,30	Slender Orcutt Grass
36N06W: S10,15-17,20-23,26-35	Steelhead Trout (CCV-ESU)
38N03E: S34	Slender Orcutt Grass
39N05E: S34	Slender Orcutt Grass