

MORMON CRICKET & GRASSHOPPER SURVEY AND SUPPRESSION PROGRAM

Public meeting addressing suppression efforts and pesticide use for control of Mormon Crickets and grasshoppers on public lands.

This meeting and presentation is being recorded and will be available for viewing on the NDA website.



March 9th, 2021 6:00pm

ABOUT THE MORMON CRICKET & GRASSHOPPER SURVEY AND SUPPRESSION PROGRAM

- **Conducts surveys for grasshopper and Mormon cricket populations in Nevada**
 - Support/Justify treatment
 - Predict populations in the next year
- **Provides technical assistance on management to landowners/managers**
 - Species of concern in Nevada:
 - Mormon cricket
 - migratory grasshopper
 - valley grasshopper
 - clearwing grasshopper
- **Subject to available funding, suppresses economically damaging grasshoppers and Mormon cricket outbreaks on Federal, State, tribal and private rangeland.**
 - Paperwork must be in place
 - Treatable populations densities depend on species and situation
 - Mormon Crickets 2 per square yard
 - Grasshoppers 8 per square yard
 - Benefit to the rangeland must outweigh cost
 - Clear of all threatened and endangered (T&E) species (Lahontan cutthroat trout, sage grouse, Carson wandering skipper)
 - All dependent on available funding and resources
 - Current state funding is projected to run out in the 2022 season

TREATMENTS AND SUPPRESSION

- **Types of treatments**
 - Applications are applied using reduced area and agent treatments (RAATs)
 - Aerial
 - Ground
- **Pesticide options for the program**
 - Diflubenzuron-usually applied aerially
 - RAATs-applied at 1oz formulation per acre, skip swath
 - Carbaryl-usually applied by ground
 - RAATs-applied at 2lb per acre
 - Malathion
 - Not a preferred option, but is still in the EIS, would only be discussed in extreme cases
- **Treatments are conducted to protect:**
 - Cropland, urban interface, rangeland forage, public safety
- **Identification of pests are vital to successful treatments!**
 - Timing is key



REVIEW OF 2020

- **Survey and treatment numbers**

- 739 sites were surveyed for Mormon cricket and grasshopper populations
 - 206 sites recorded populations of MC >2 per sq/yd
- 434 acres were treated, with 5% carbaryl active ingredient, at 34 sites for Mormon crickets or grasshoppers in 2020.
 - Treatment were made from the ground using trucks or ATVs with blowers.
- No aerial treatments were made in 2020

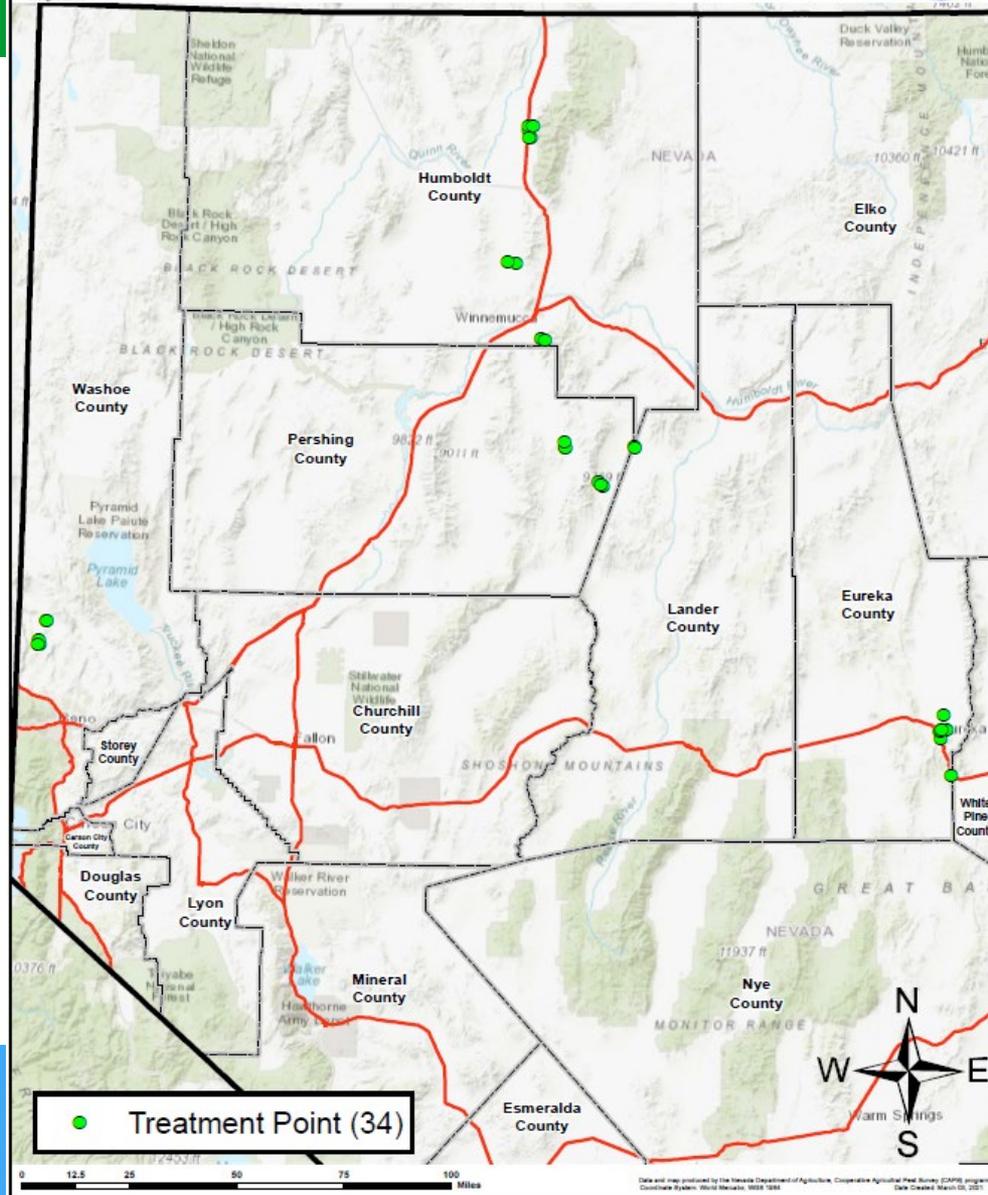
County	Treatment Sites	Pounds Spread	Acres Treated
Humboldt	9	240	120
Pershing	7	187	93.5
Lander	2	120	60
Eureka	10	232	116
Washoe	6	89	44.5
Totals	34	868	434

- **Observations**

- Crickets in more areas across the state, but not an increase in damaging populations.
- Decrease in populations in July.



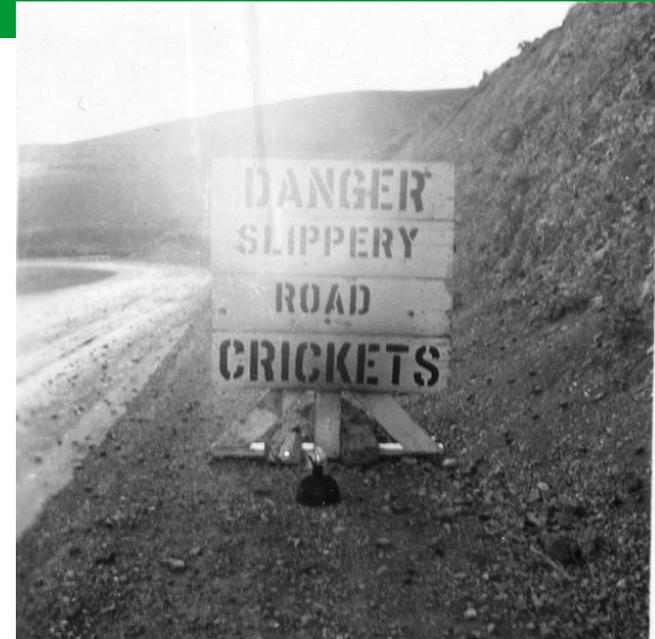
Mormon Cricket & Grasshopper Survey 2020 Treatment Sites



REVIEW OF 2020

- **Issues**

- Treatments
 - Land ownership(checkerboard)
 - Terrain-access for survey and treatments
 - Buffers-water, sensitive species, urban interface
 - Moving target
 - One treatment in specific area per year
- Communications
- COVID (travel, delays in hiring and other restrictions)
- EA comments (Open for comment until March 19th)
 - Posted earlier to allow more time for addressing comments



EXPECTATIONS IN 2021

- **Predictions- Best Guess!**

- Possible lower MC populations?

- **Survey and Treatments**

- Seasonal Staff-hire March/April
- Initial surveys have already started
- Aerial Treatment Blocks
- Ground treatments
- Cost share-1/3 state 1/3 Federal 1/3 Private
 - Treatments covered under this cost share are generally carried out in conjunction with and complement Federal, State, and private efforts to prevent, control, or suppress grasshopper outbreaks.
 - On APHIS run suppression programs, the Federal government will bear the cost of treatment up to 100 percent on Federal and Tribal Trust land, 50 percent of the cost on State land, and 33 percent of cost on private land. (There is an additional 16.15% charge on any funds received by APHIS for federal involvement with suppression treatments.) The state will bear the remaining 50% of state land and 33% of private land. The remaining 33% is covered by the private landowner.
 - Private landowners must have money in an escrow account before treatments can begin.

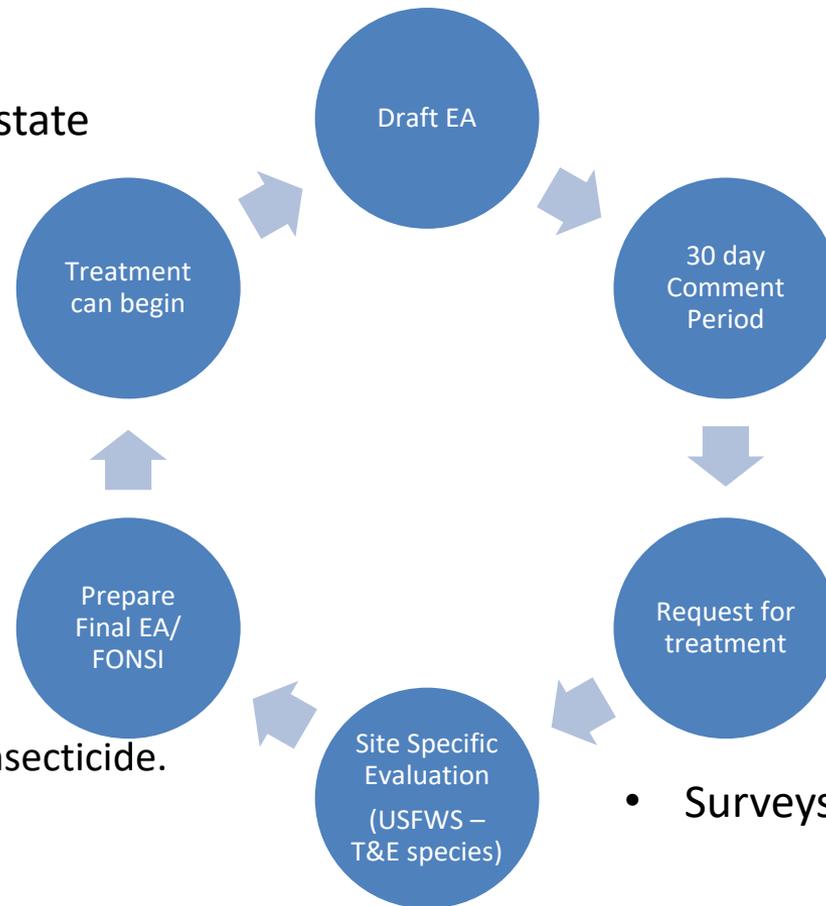
EXPECTATIONS IN 2021

- **Environmental Impact Statement (EIS)**
 - National document, updated in 2019
- **Environmental Assessment (EA)**
 - Nevada specific tiered of EIS
 - EA draft is published and available for viewing and comment
 - Comment period closes March 19, 2021
- **Pesticide Use Proposals (PUPS)**
 - Provided by federal land managers
 - Allow us to use certain chemicals
 - 3 years
- **Letters of Request (LOR)**
 - Required from land managers/owners before treatment can begin.
- **Finding of No Significant Impact (FONSI)**
 - Issued by USDA APHIS

NEPA Process

Survey

- USDA staff from out of state
- NDA Seasonal



★ We are here.
Comment period closes
March 19, 2021

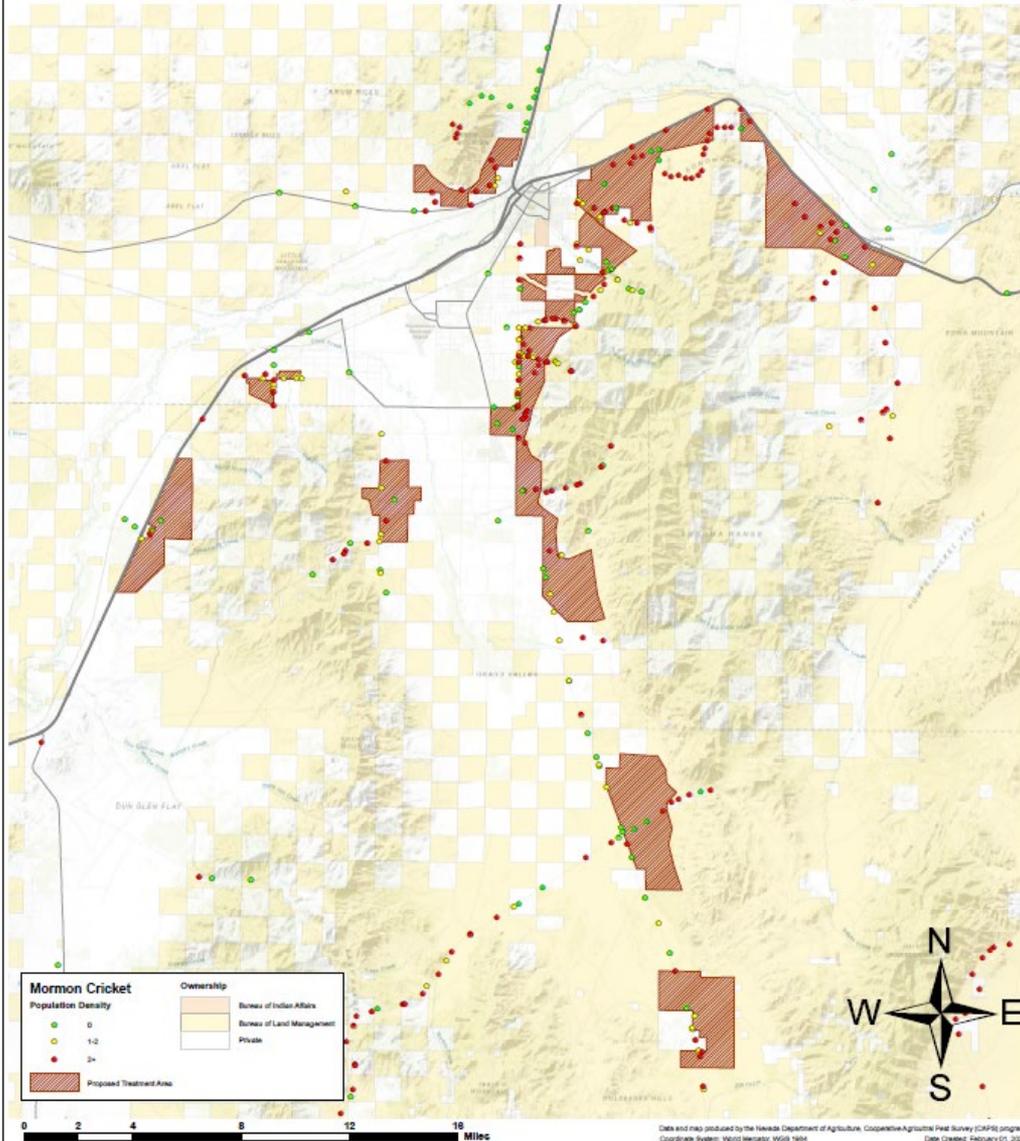
- Respond to comments

Water Buffers:

- 500-foot with aerial liquid insecticide.
- 50-foot with ground bait.

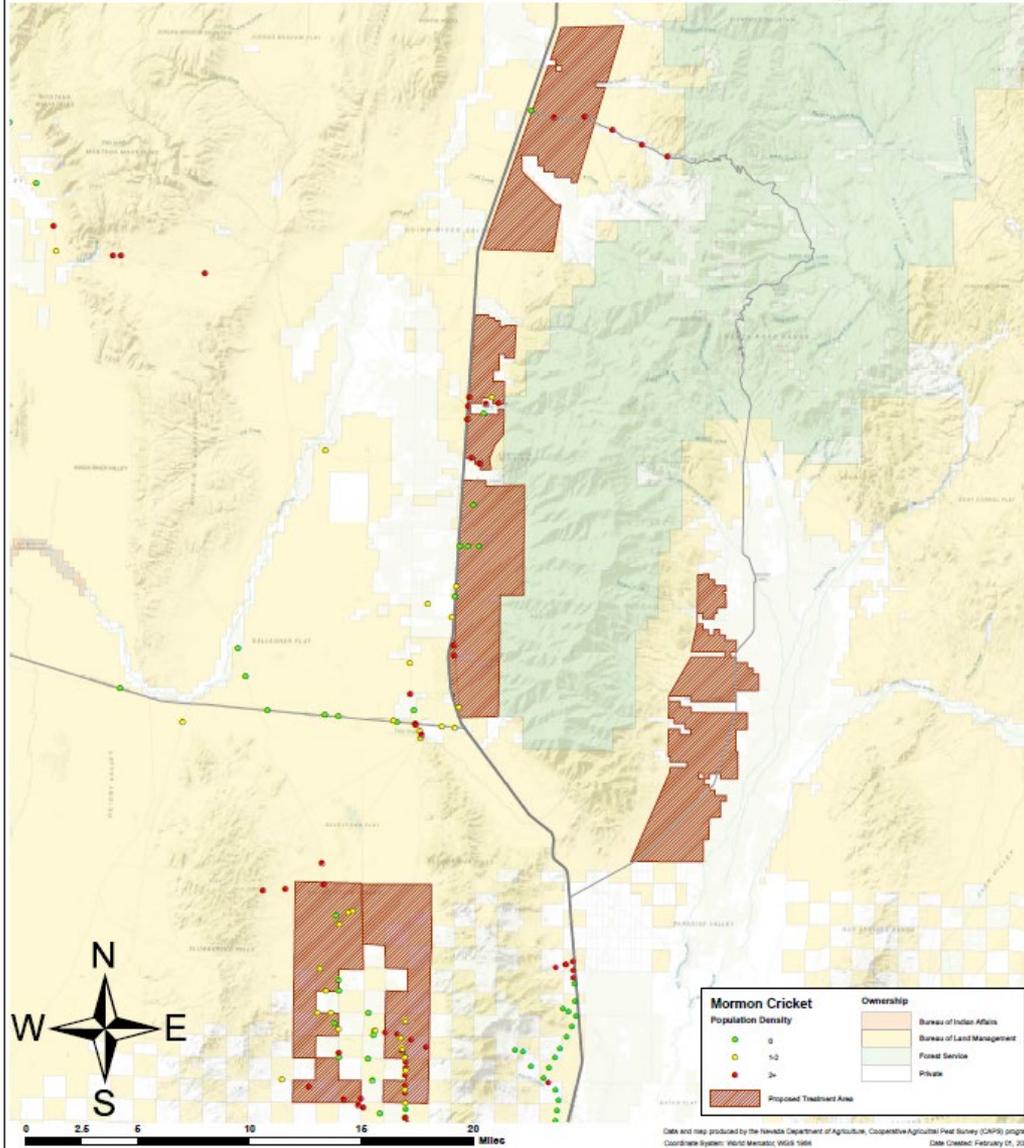
- Surveys, GIS mapping, Buffers

2021 Mormon Cricket & Grasshopper Proposed Treatment Sites Winnemucca/Grass Valley



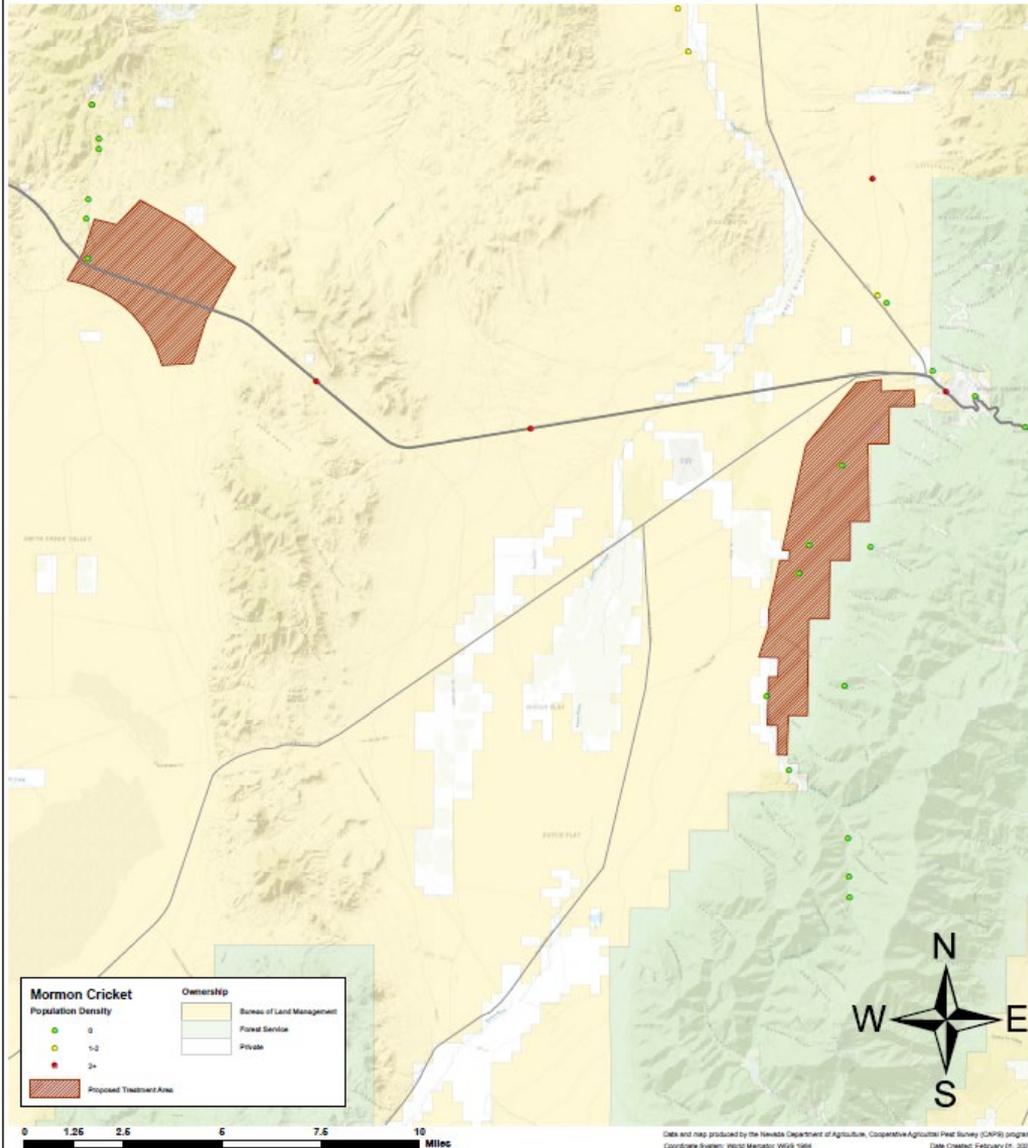
- The treatment areas presented are based on populations from the previous year
- These are not final and will change.
- Not all the areas will be treated, and other areas may be added based on early season surveys.

2021 Mormon Cricket & Grasshopper Proposed Treatment Sites Orovada/Paradise Valley



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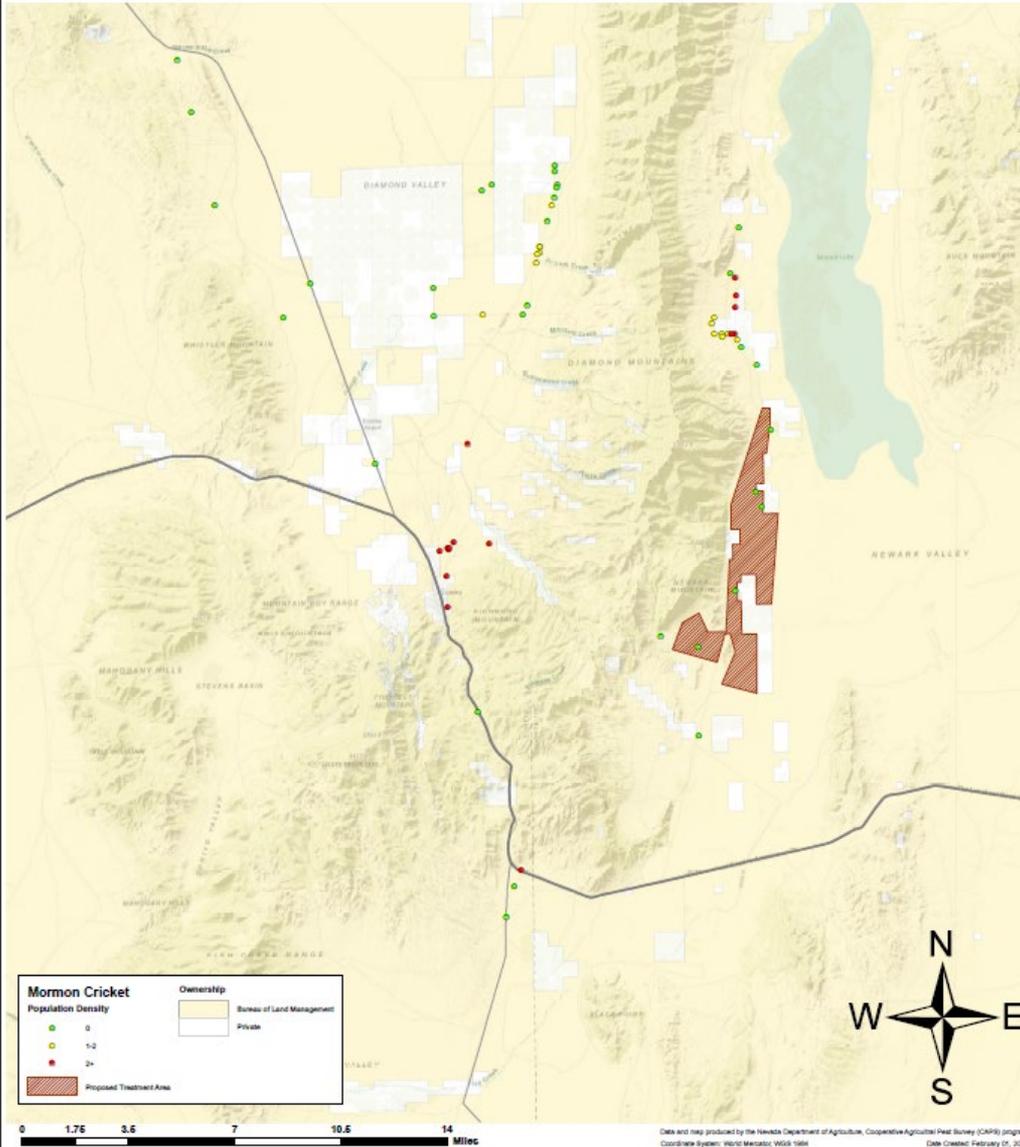
2021 Mormon Cricket & Grasshopper Proposed Treatment Sites Austin



- The treatment areas presented are based on populations from the previous year
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2021 Mormon Cricket & Grasshopper Proposed Treatment Sites Eureka



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WHAT CAN YOU DO?

- **Treat and Control**
 - Where to purchase?
 - NDA does not supply pesticide to private businesses
 - No bait giveaway from NDA
- **Fencing**
 - Use smooth material such as plastic sheeting or sheet metal
 - As least 18" high
- **Engage**
- **Create local pest districts**
- **Report sightings at NDA website**
 - Populations of grasshoppers and crickets are measured in density per square yard
 - GPS coordinates, we prefer decimal degree

RESOURCES

- **All resources are available on the NDA Plant Industry meeting page.**
- **An email will be sent to all registered attendees with links to resource documents about the program and pest of concern.**
- **Resources include:**
 - A link to view the Environmental Assessment and directions on how to comment.
 - A link to the recording of this meeting and a copy of this presentation
 - Link to USDA program page
 - Datasheets on Mormon crickets and grasshoppers of concern
 - Proposed aerial treatment maps
 - Link to Mormon Cricket and Grasshopper reporting form

MORMON CRICKET & GRASSHOPPER SURVEY AND SUPPRESSION PROGRAM CONTACTS

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Thank You!