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*Final Environmental Impact Statement*  
*Thacker Pass Lithium Mine Project*

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*Appendix A*

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Figures

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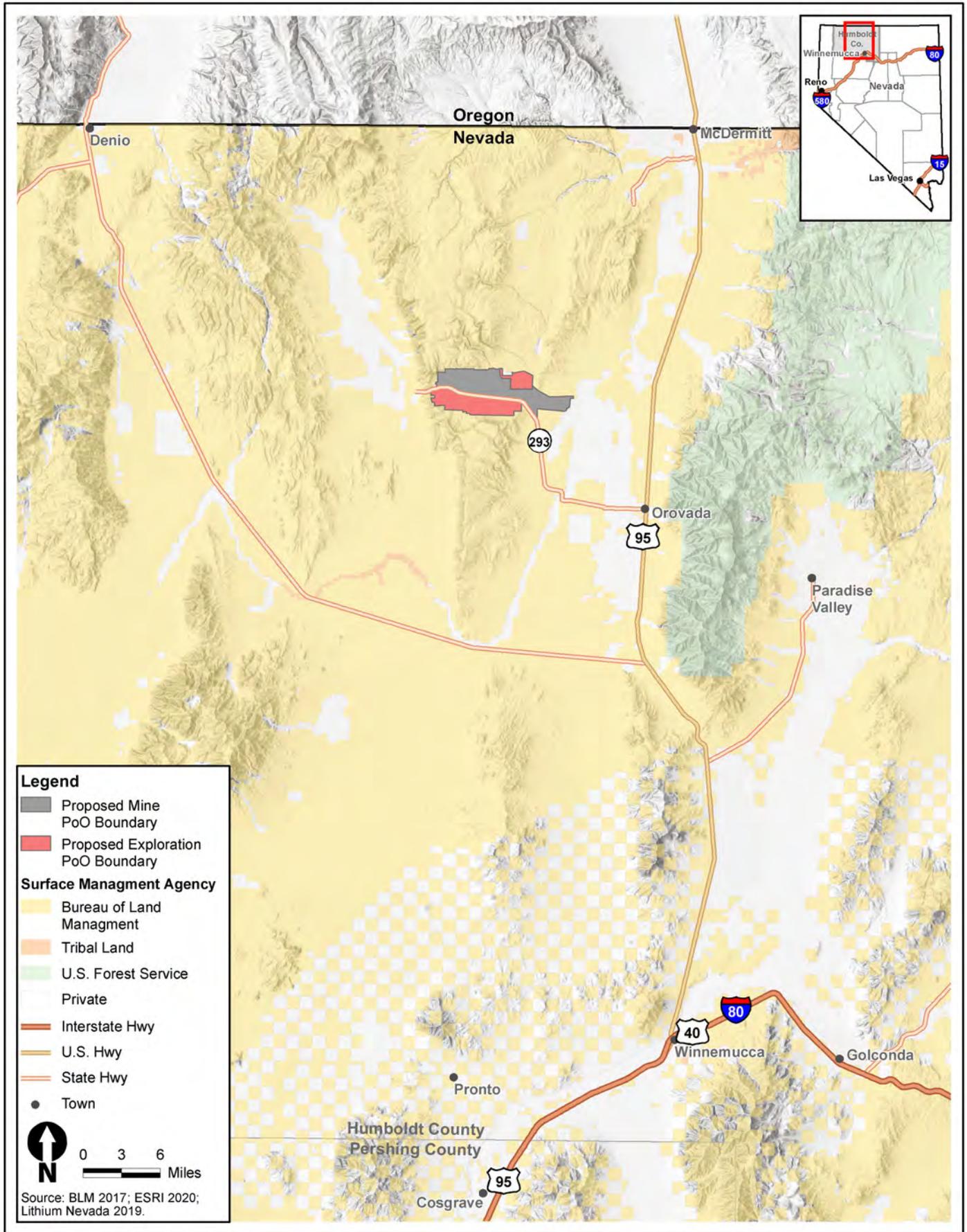
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## APPENDIX A. FIGURES

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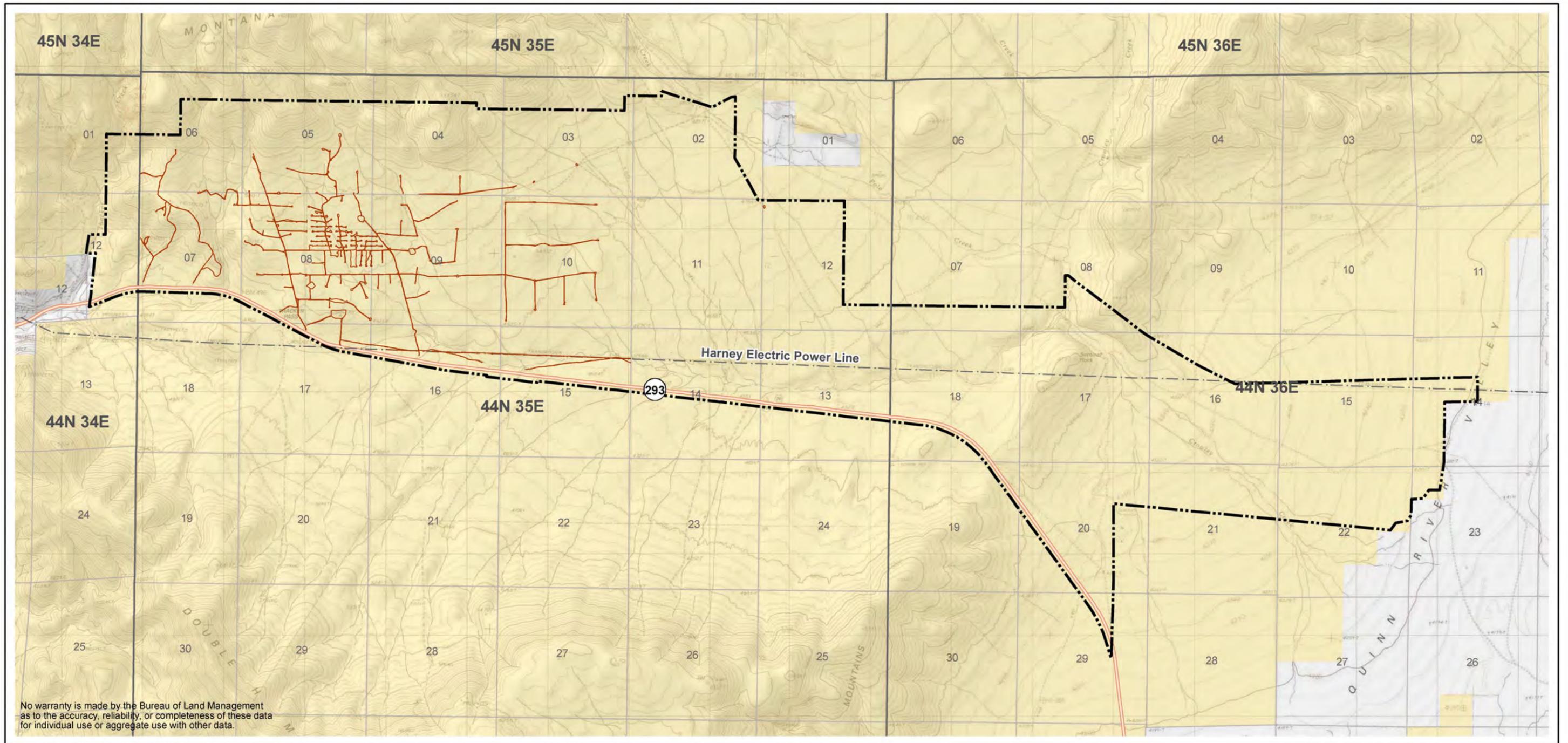
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**Figure 1-1  
 Project Location**



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**Legend**

- |                      |                                  |          |
|----------------------|----------------------------------|----------|
| PoO Boundary         | <b>Surface Management Agency</b> | Township |
| Existing Disturbance | Bureau of Land Management        | Section  |
| Existing Powerline   | Private                          |          |
| State Highway        |                                  |          |



Source: Lithium Nevada 2019; Nat'l Geographic 2013.

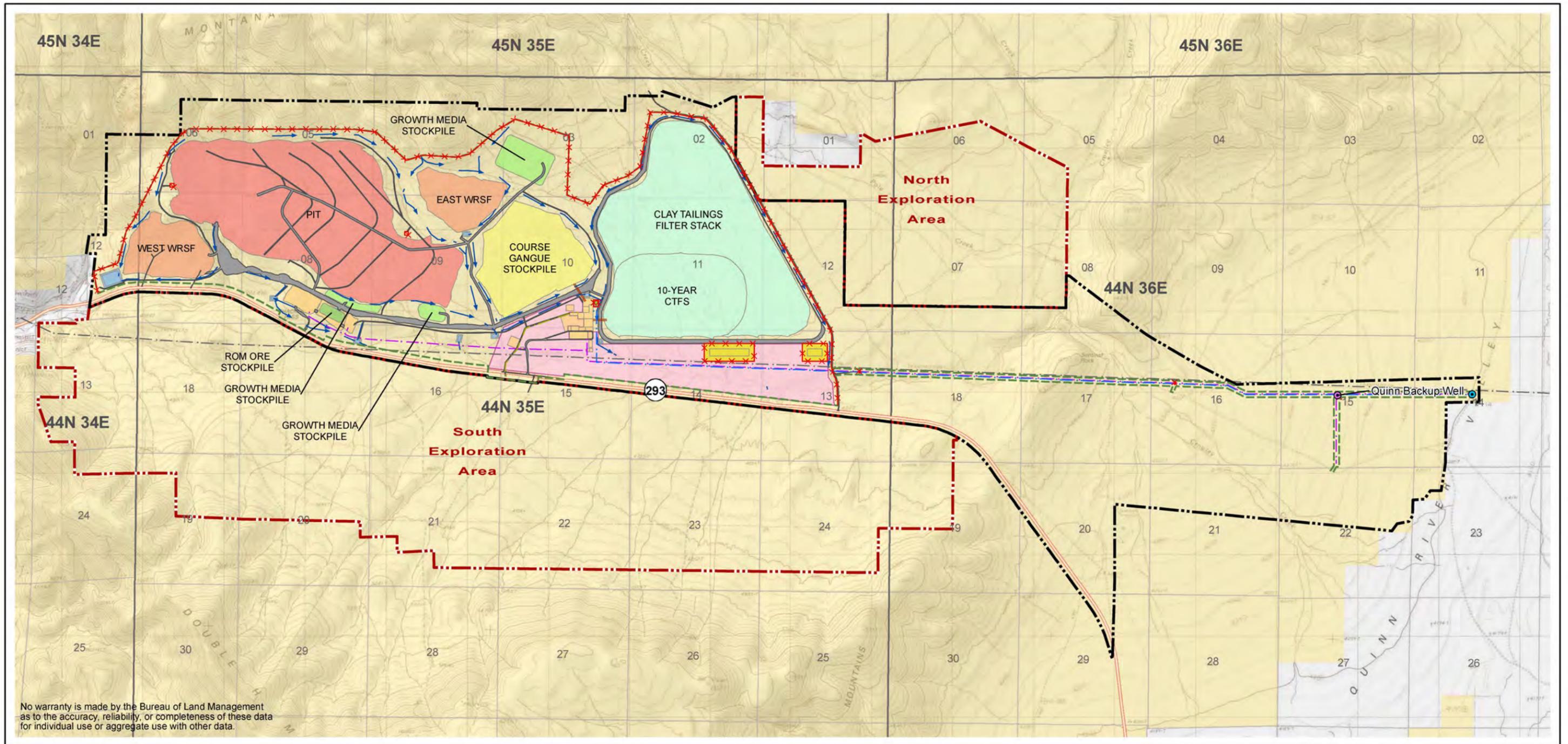


0 0.5 1 Miles

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**Figure 2-1**  
**Existing Disturbance within the Proposed Project Area**



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**Legend**

- |                             |                              |                            |                                 |                                  |
|-----------------------------|------------------------------|----------------------------|---------------------------------|----------------------------------|
| PoO Boundary                | Existing Power Line          | Roads                      | Run of Mine (ROM) Ore Stockpile | Township                         |
| Exploration Area            | Power Line                   | Clay Tailings Filter Stack | Waste Rock Storage Facility     | Section                          |
| Disturbance Area Boundary   | Water Line                   | Course Gangue Stockpile    | Emergency Pond                  | <b>Surface Management Agency</b> |
| Future Plant Expansion Area | Fiber Optic Line             | Growth Media Stockpile     | Reclaim Pond                    | Bureau of Land Management        |
| Existing Water Well         | Fence                        | Mine Facilities            | Sediment Pond                   | Private                          |
| Proposed Water Well         | Culvert                      | Pit                        |                                 |                                  |
| State Highway               | Stormwater Diversion Channel |                            |                                 |                                  |
|                             | Conveyor Corridor            |                            |                                 |                                  |

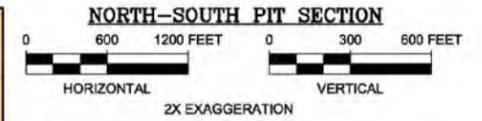
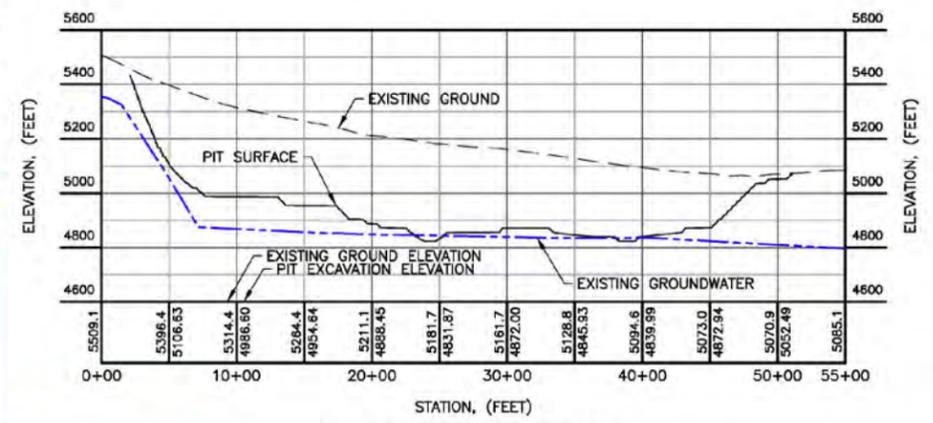
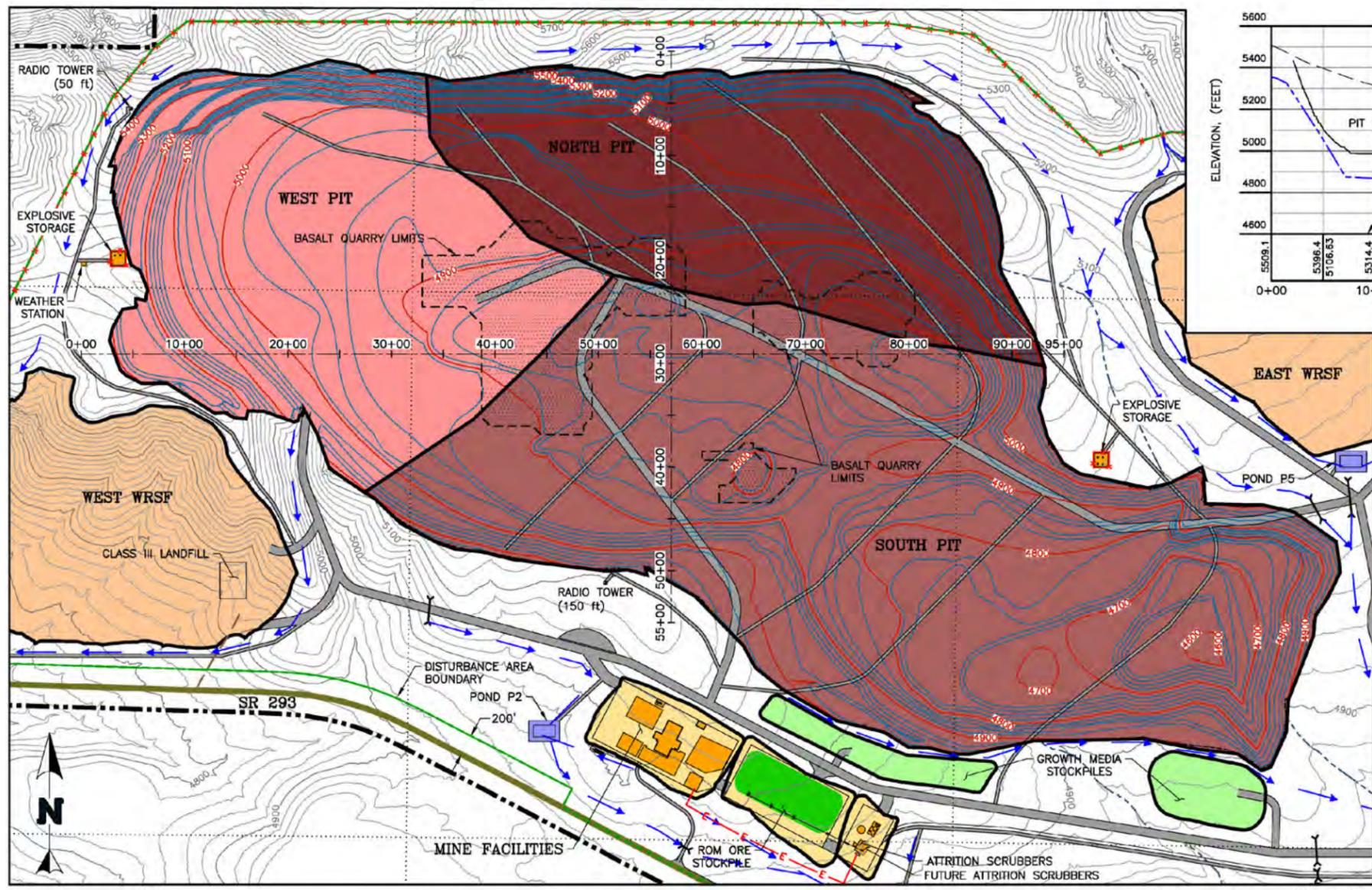
Source: Lithium Nevada 2020; Nat'l Geographic 2013.

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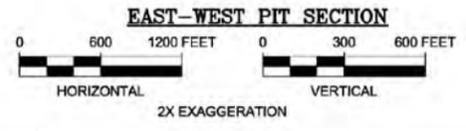
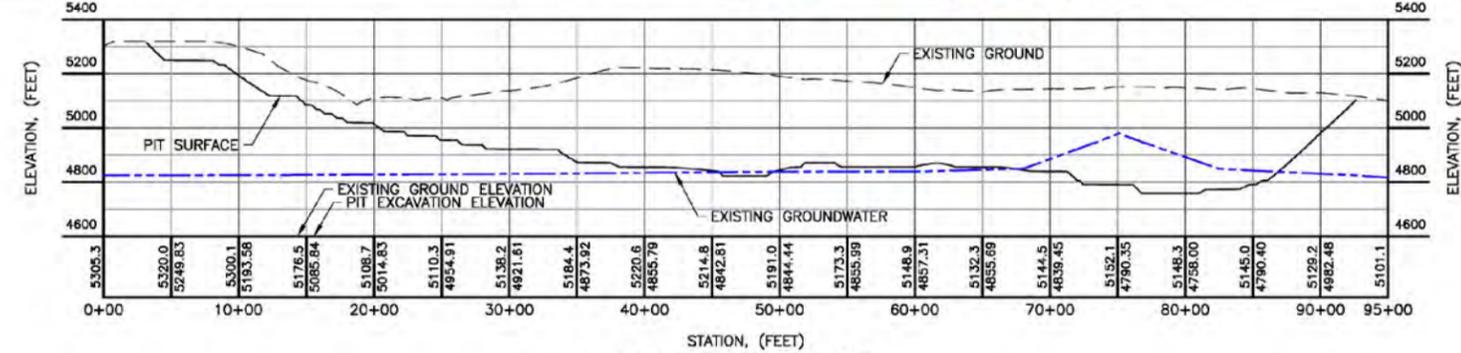


**Figure 2-2**  
**Proposed Action Mine Facilities**



- LEGEND:**
- EXISTING GROUND 20 FOOT CONTOURS
  - EXISTING CONTOUR ELEVATION
  - PIT EXCAVATION 20 FOOT CONTOURS
  - PIT EXCAVATION CONTOUR ELEVATION
  - EXISTING ROADS-MAJOR
  - EXISTING ROADS/TRAILS
  - EXISTING DRAINAGES
  - SECTION LINES
  - SECTION NUMBER
  - POO BOUNDARY
  - DISTURBANCE AREA BOUNDARY
  - ROADS
  - FENCE
  - POWER LINE
  - STORMWATER DIVERSION CHANNEL
  - CULVERT
  - WASTE ROCK STORAGE FACILITY (WRSF)
  - WEST PIT
  - NORTH PIT
  - SOUTH PIT
  - GROWTH MEDIA STOCKPILE
  - MINE FACILITIES
  - ROM ORE STOCKPILE
  - MINE/PLANT INFRASTRUCTURE
  - BASALT QUARRY LIMITS
  - SEDIMENT POND

**NOTE:**  
1. ALL LINE WORK IS PROPOSED UNLESS CALLED OUT AS EXISTING.



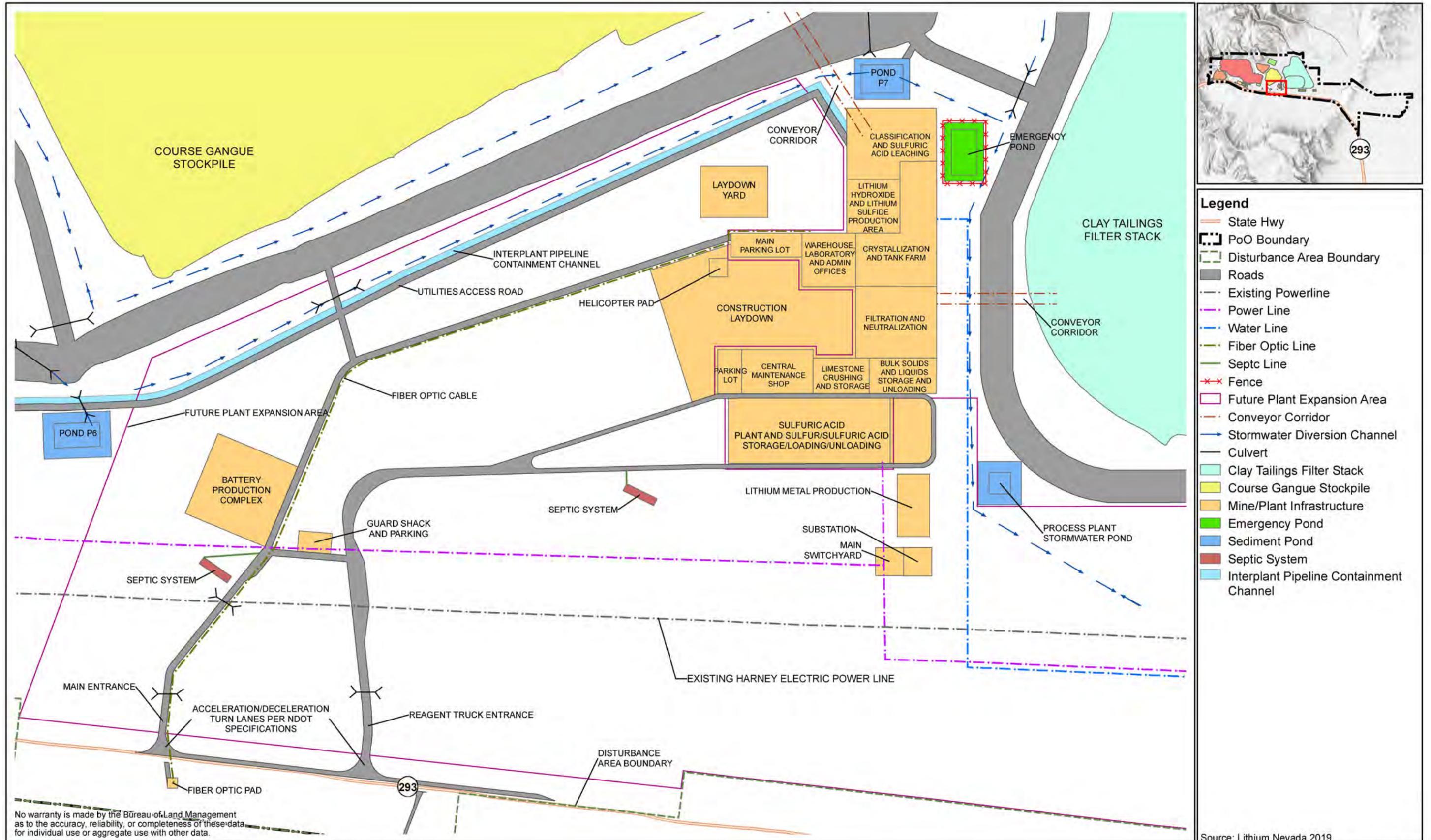
Source: Lithium Nevada 2019



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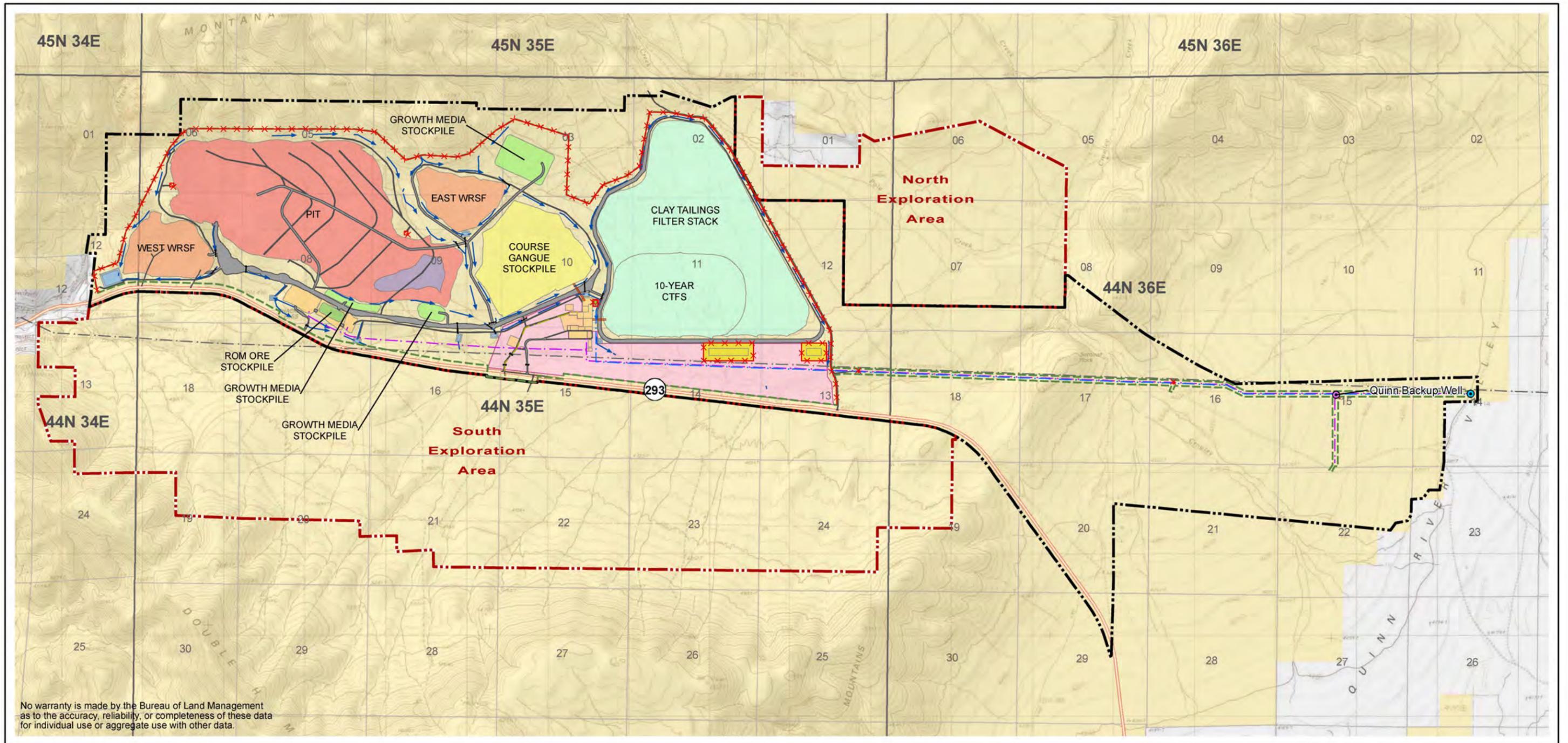
**Figure 2-3**  
**Proposed Open Pit Cross Sections**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

Source: Lithium Nevada 2019

**Figure 2-4**  
**Proposed Plant Site Layout**



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**Legend**

- |                             |                              |                            |                                 |                                  |
|-----------------------------|------------------------------|----------------------------|---------------------------------|----------------------------------|
| PoO Boundary                | Existing Power Line          | Roads                      | Run of Mine (ROM) Ore Stockpile | Township                         |
| Exploration Area            | Power Line                   | Clay Tailings Filter Stack | Waste Rock Storage Facility     | Section                          |
| Disturbance Area Boundary   | Water Line                   | Course Gangue Stockpile    | Emergency Pond                  | <b>Surface Management Agency</b> |
| Future Plant Expansion Area | Fiber Optic Line             | Growth Media Stockpile     | Reclaim Pond                    | Bureau of Land Management        |
| Existing Water Well         | Fence                        | Mine Facilities            | Sediment Pond                   | Private                          |
| Proposed Water Well         | Culvert                      | Pit                        | Intermittent Seasonal Pond      |                                  |
| State Highway               | Stormwater Diversion Channel |                            |                                 |                                  |
|                             | Conveyor Corridor            |                            |                                 |                                  |

Source: Lithium Nevada 2019; Nat'l Geographic 2013.



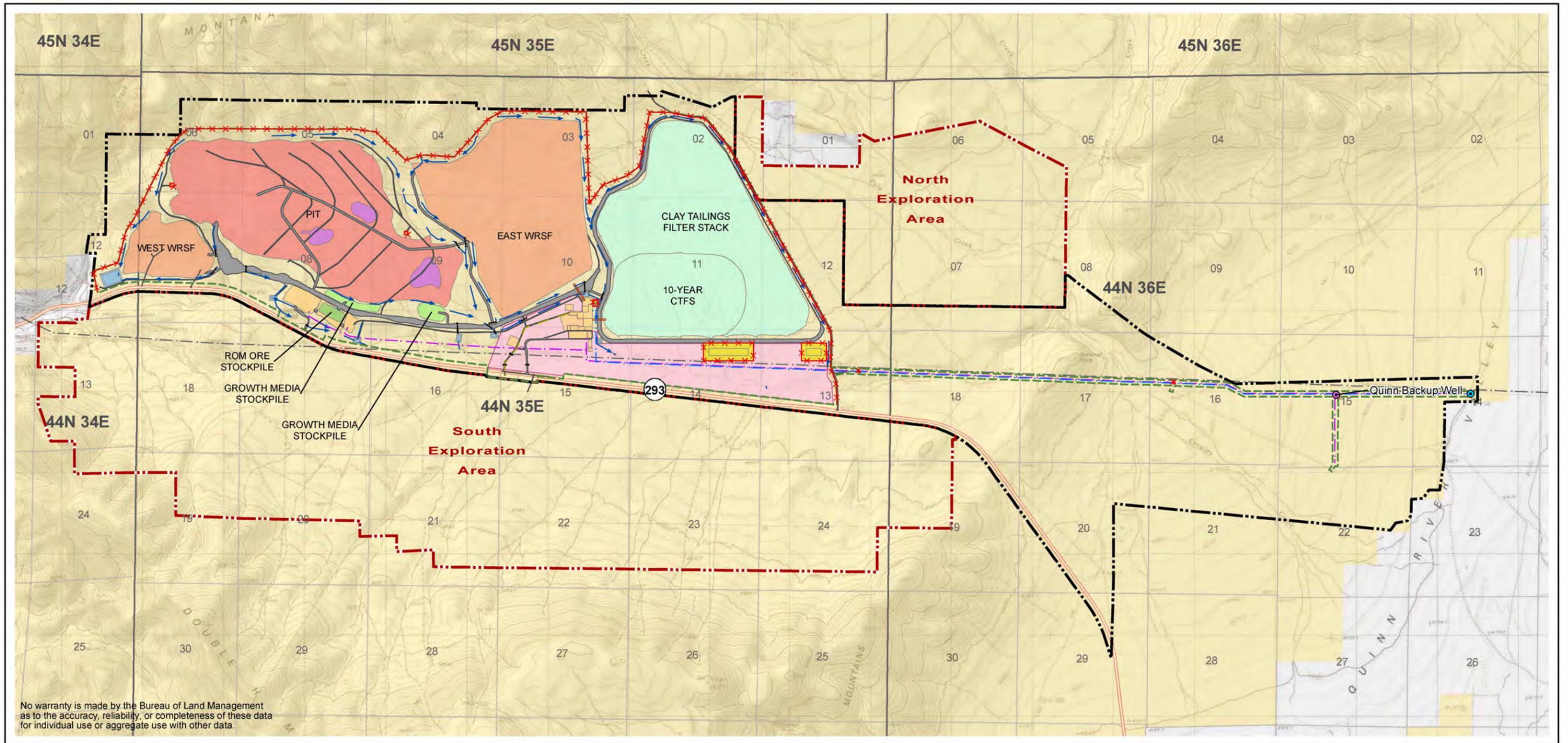
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**Figure 2-5**  
**Alternative B (Partial Backfill) Mine Facilities**



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**Legend**

- |                             |                              |                            |                                 |                                  |
|-----------------------------|------------------------------|----------------------------|---------------------------------|----------------------------------|
| PoO Boundary                | Existing Power Line          | Roads                      | Run of Mine (ROM) Ore Stockpile | Township                         |
| Exploration Area            | Power Line                   | Clay Tailings Filter Stack | Waste Rock Storage Facility     | Section                          |
| Disturbance Area Boundary   | Water Line                   | Course Gangue Stockpile    | Emergency Pond                  | <b>Surface Management Agency</b> |
| Future Plant Expansion Area | Fiber Optic Line             | Growth Media Stockpile     | Reclaim Pond                    | Bureau of Land Management        |
| Existing Water Well         | Fence                        | Mine Facilities            | Sediment Pond                   | Private                          |
| Proposed Water Well         | Culvert                      | Pit                        | Pit Lake                        |                                  |
| State Highway               | Stormwater Diversion Channel |                            |                                 |                                  |
|                             | Conveyor Corridor            |                            |                                 |                                  |

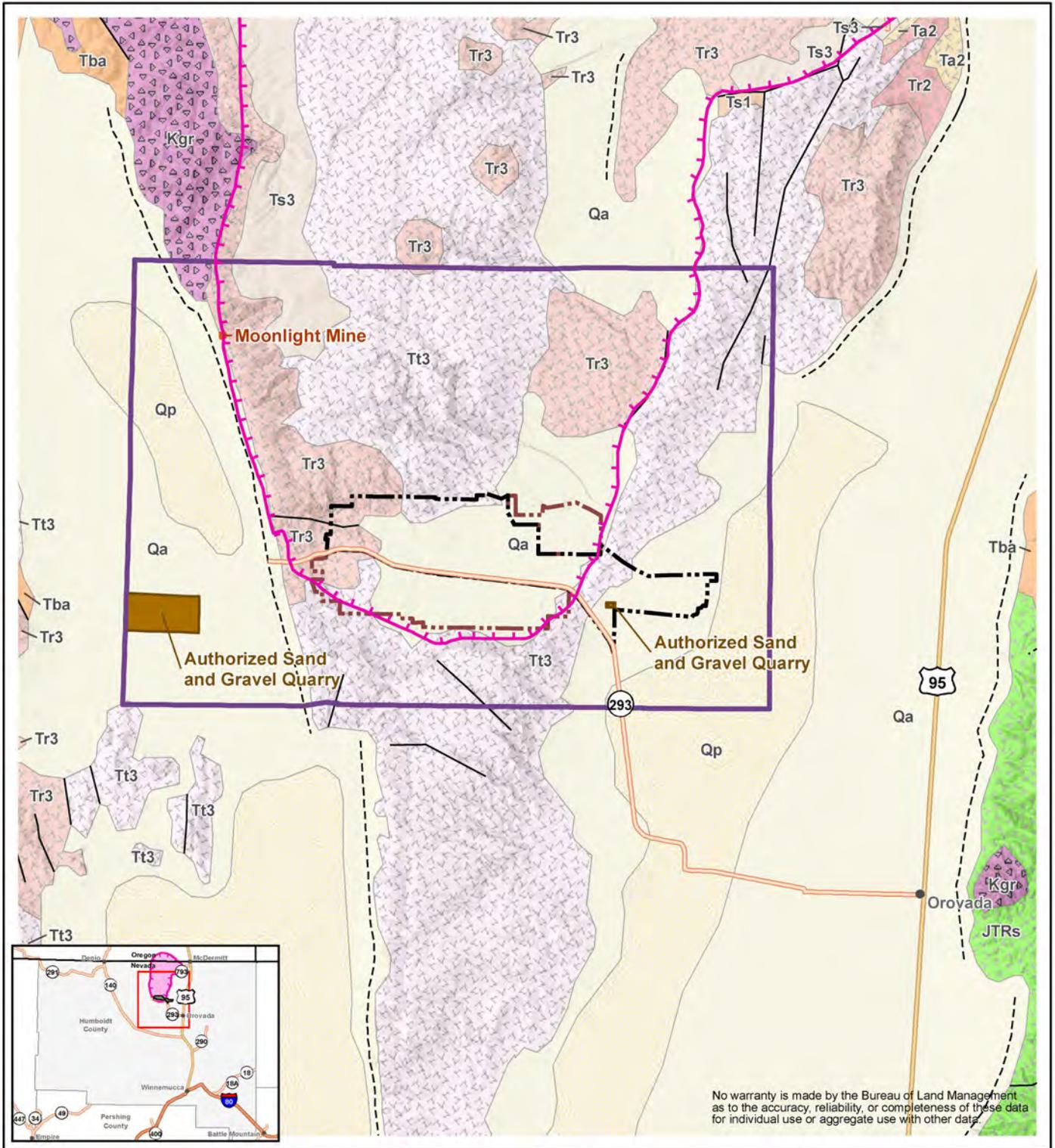
Source: Lithium Nevada 2020; Nat'l Geographic 2013.

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**Figure 2-6**  
**Alternative C (No Backfill) Mine Facilities**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- PoO Boundary
- Proposed Exploration
- PoO Boundary
- Cumulative Effects Study Area
- Moonlight Mine
- Authorized Sand and Gravel Quarry
- Qa - Alluvial Deposits
- Qp - Playa, Marsh, and Alluvial-Flat Deposits, Locally Eroded
- Kgr - Granitic Rocks
- JTRs - Shale, Mudstone, Siltstone, Sandstone, and Carbonate Rock; Sparse Volcanic Rock
- Tba - Basalt Flows
- Ts3 - Tuffaceous Sedimentary Rocks
- Tt3 - Welded and Non Welded Silicic Ash-Flow Tuff
- Tr3 - Rhyolitic Flows and Shallow Intrusive Rocks
- Ta2 - Andesite and Related Rocks of Intermediate Composition
- Tr2 - Rhyolitic Flows and Shallow Intrusive Rocks Andesite and Related Rocks of Intermediate Composition
- Ts1 - Sedimentary Rocks
- McDermitt Caldera
- Normal Fault (Dashed where Concealed)
- U.S. Highway
- State Highway

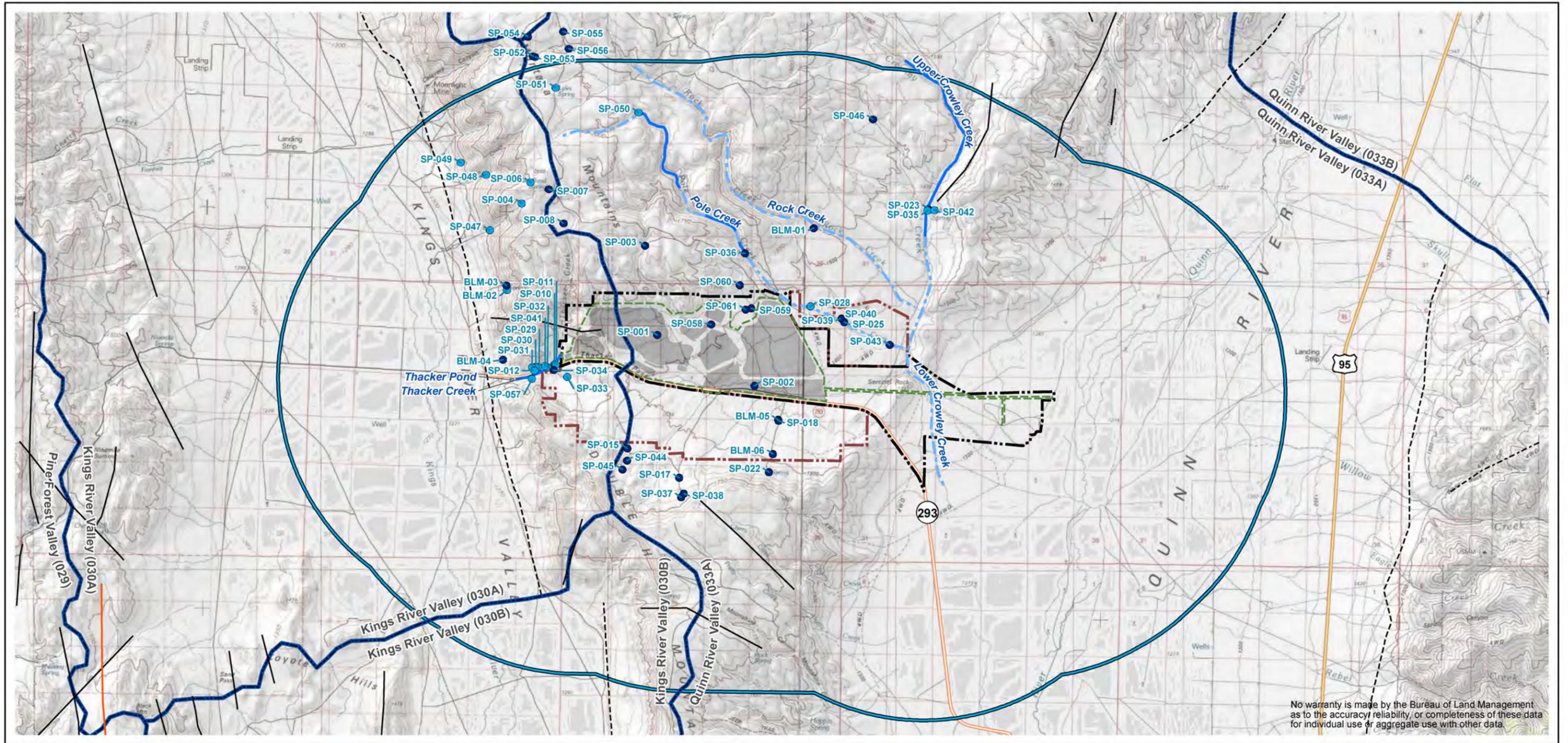
Source: BLM 2019, NBMG 2016, 2020.



0 1 2 Miles

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**Figure 4.2-1**  
**Geology Cumulative Effects Study Area**



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- |                                   |                             |                                       |
|-----------------------------------|-----------------------------|---------------------------------------|
| PoO Boundary                      | Hydrographic Basin Boundary | Normal Fault (Dashed where Concealed) |
| Proposed Exploration PoO Boundary | Hydrologic Study Area       | High-angle Fault, Normal              |
| Disturbance Area Boundary         | Perennial Stream            |                                       |
| Mining Facilities                 | Ephemeral Stream            |                                       |
| U.S. Highway                      | Perennial Spring            |                                       |
| State Highway                     | Other Spring                |                                       |
|                                   | Lake or Pond                |                                       |

Source: Piteau 2020; NatGeo 2013.

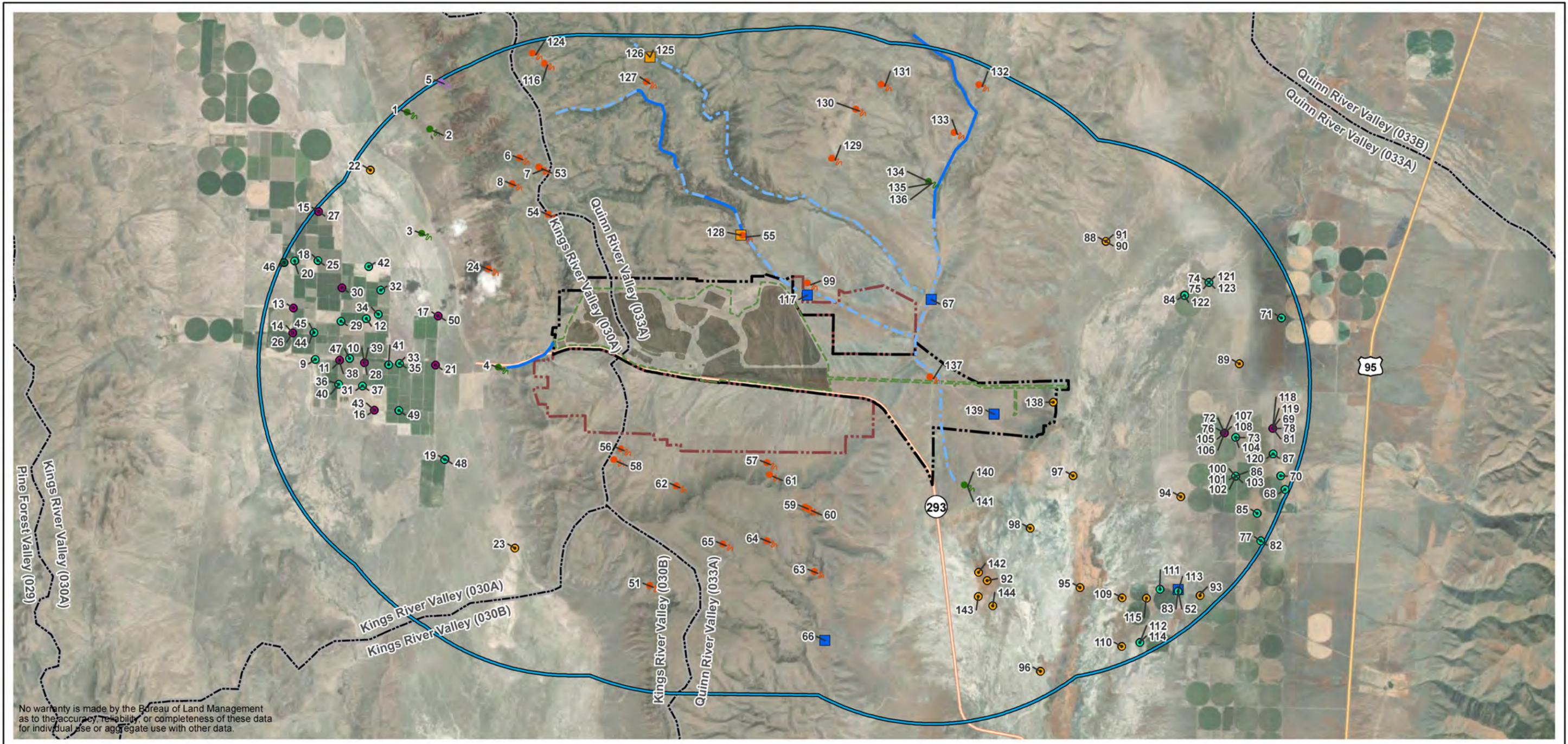


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**Figure 4.3-1**  
**Hydrologic Study Area**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Mining Facilities
- Hydrographic Basin Boundary
- Water Rights Study Area
- Perennial Stream
- Ephemeral Stream

- Water Rights**
- Spring - Irrigation
- Spring - Stock Watering
- Spring - Other
- Stream - Irrigation
- Stream - Stock Watering
- Well - Other
- Well - Irrigation
- Well - Quasi-municipal
- Well - Stock Watering

- Roads**
- U.S. Highway
- State Highway

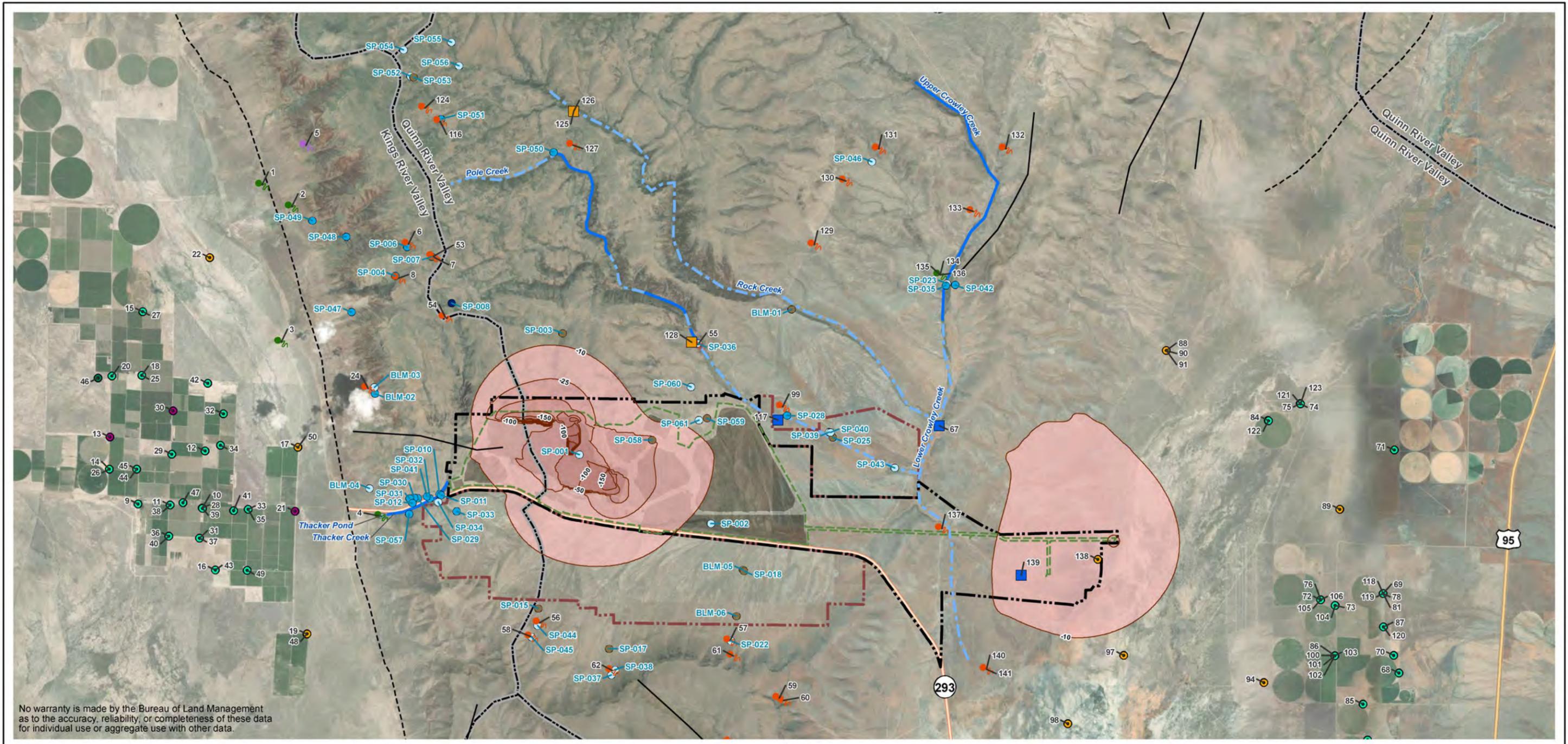
Source: ESRI 2020; Piteau 2020, NDWR 2020.

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**Figure 4.3-2**  
**Active Water Rights**



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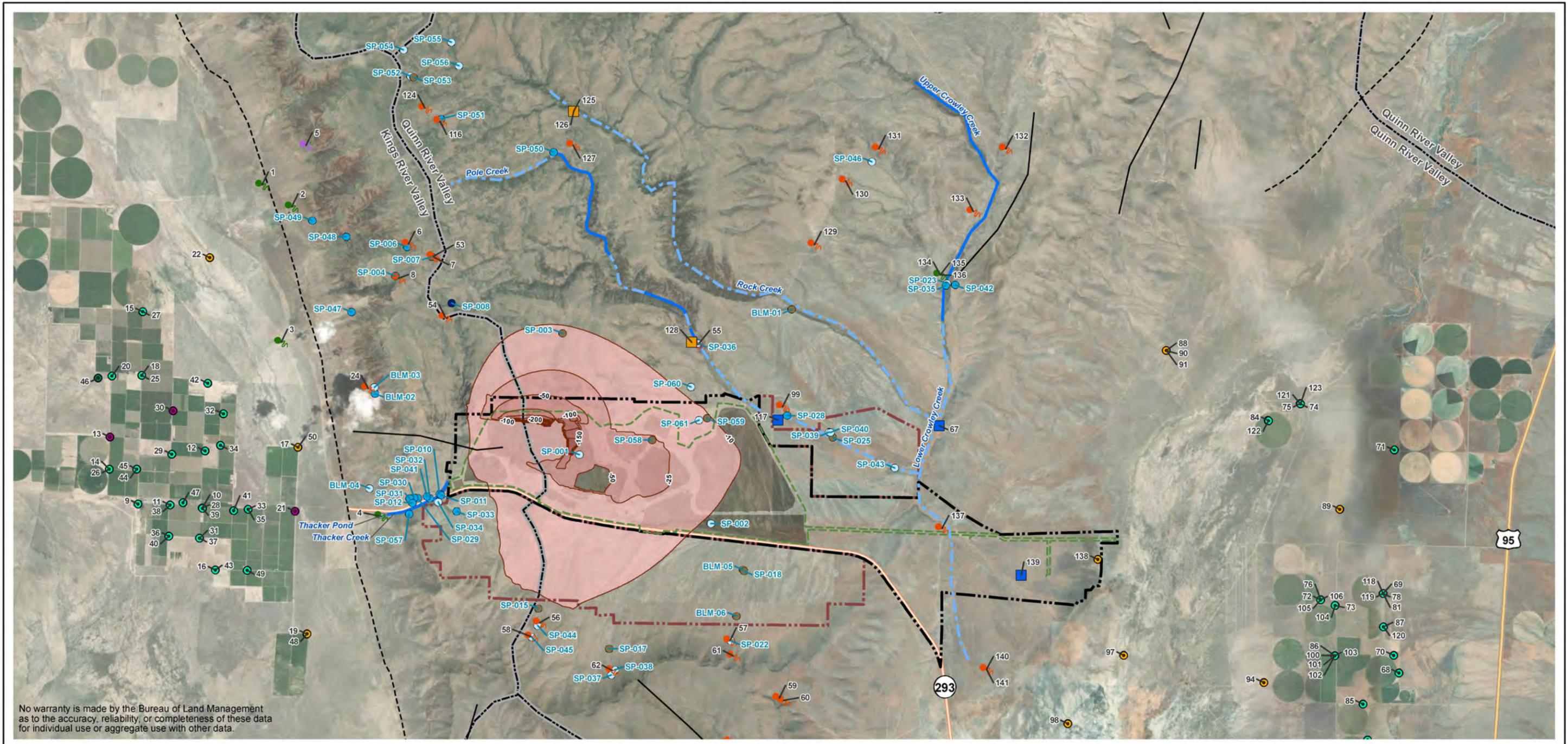
<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<p><b>Water Rights (21)</b></p> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<p><b>Springs (SP-038)</b></p> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<p><b>Groundwater Drawdown (ft)</b></p> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

0 0.5 1 Miles  
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**Figure 4.3-3**  
**Predicted Groundwater Drawdown Proposed Action (End of Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



Source: ESRI 2020; Piteau 2020, NDWR 2020.

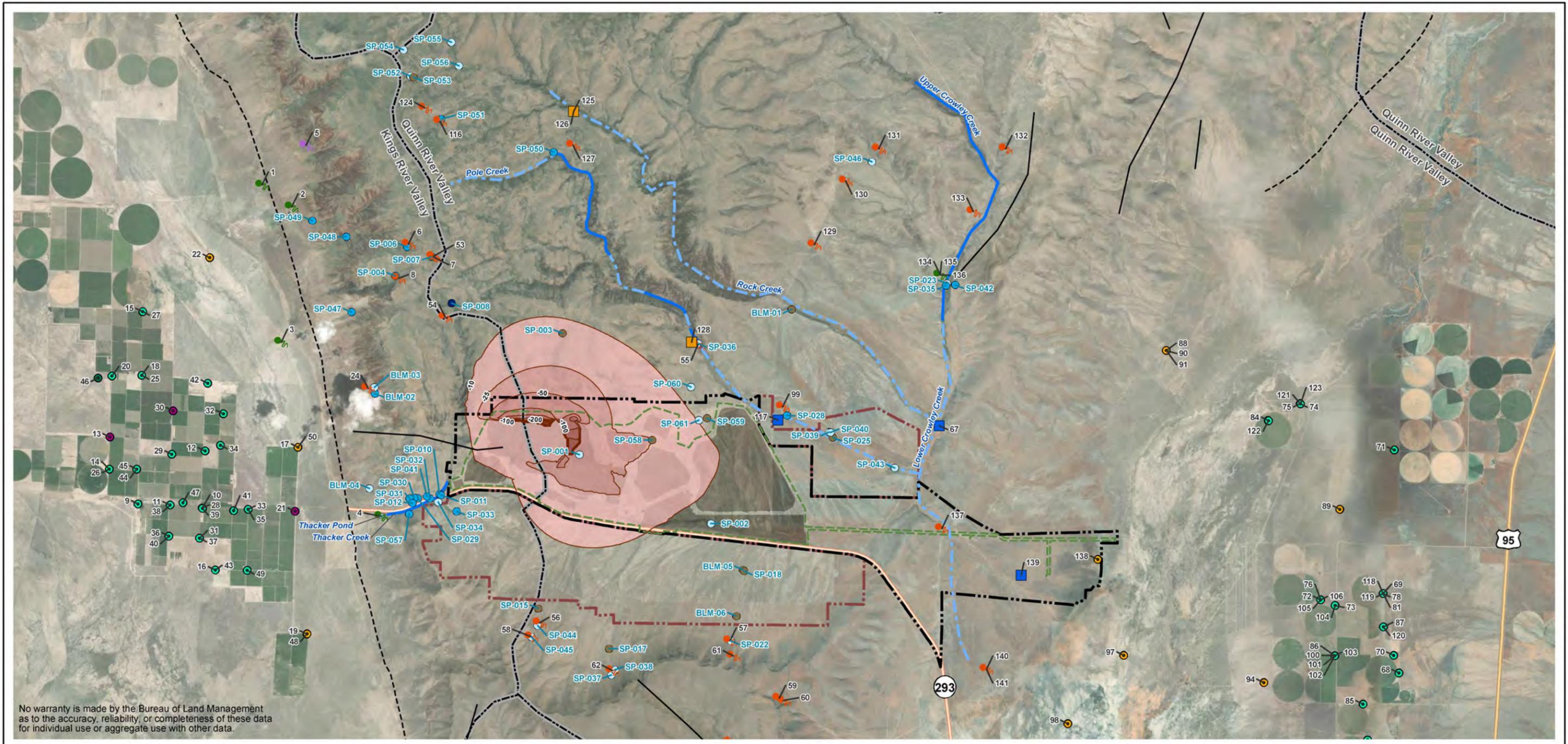


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**Figure 4.3-4**  
**Predicted Groundwater Drawdown - Proposed Action (25-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.



Source: ESRI 2020; Piteau 2020, NDWR 2020.

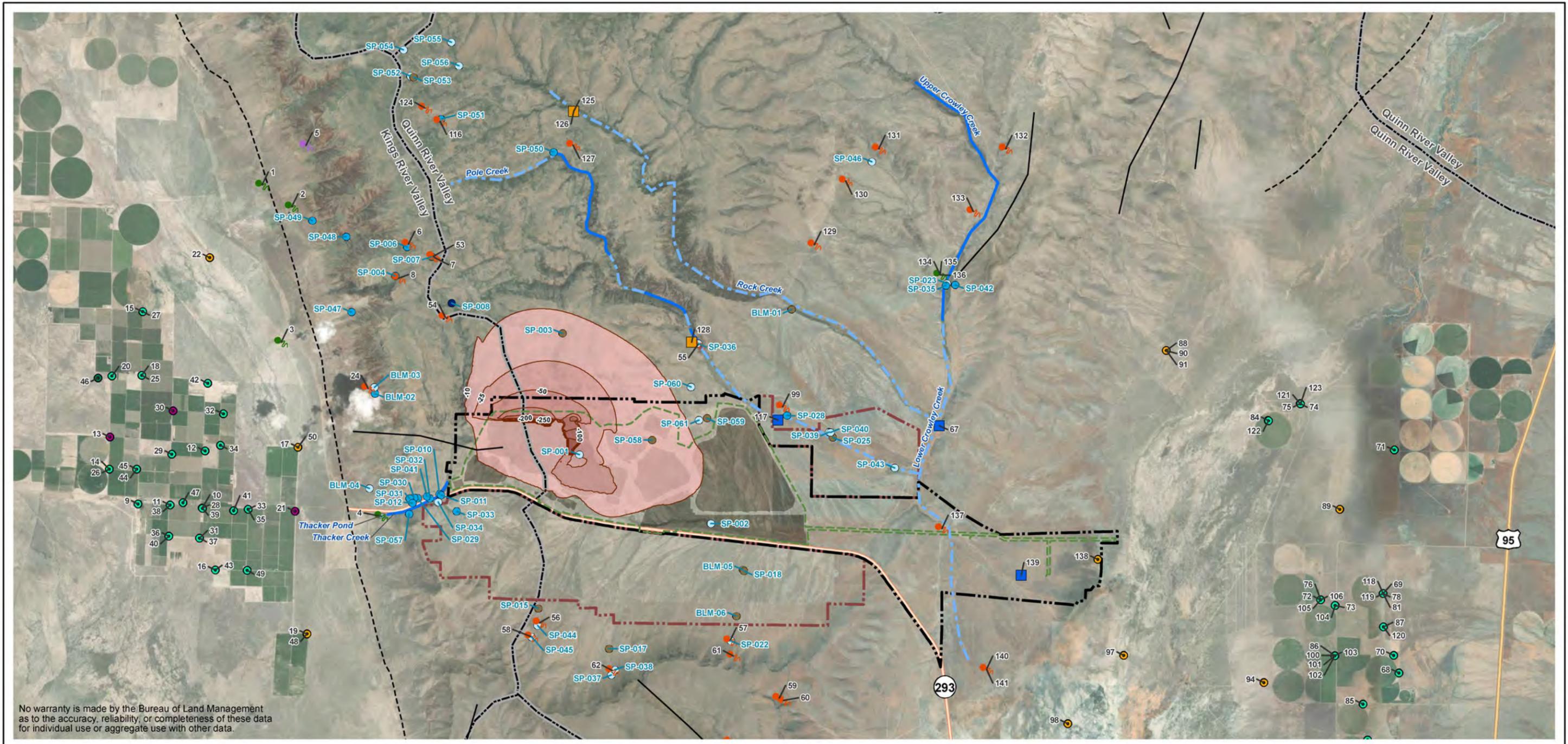


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**Figure 4.3-5**  
**Predicted Groundwater Drawdown - Proposed Action (50-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<p><b>Water Rights (21)</b></p> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<p><b>Springs (SP-038)</b></p> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<p><b>Groundwater Drawdown (ft)</b></p> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

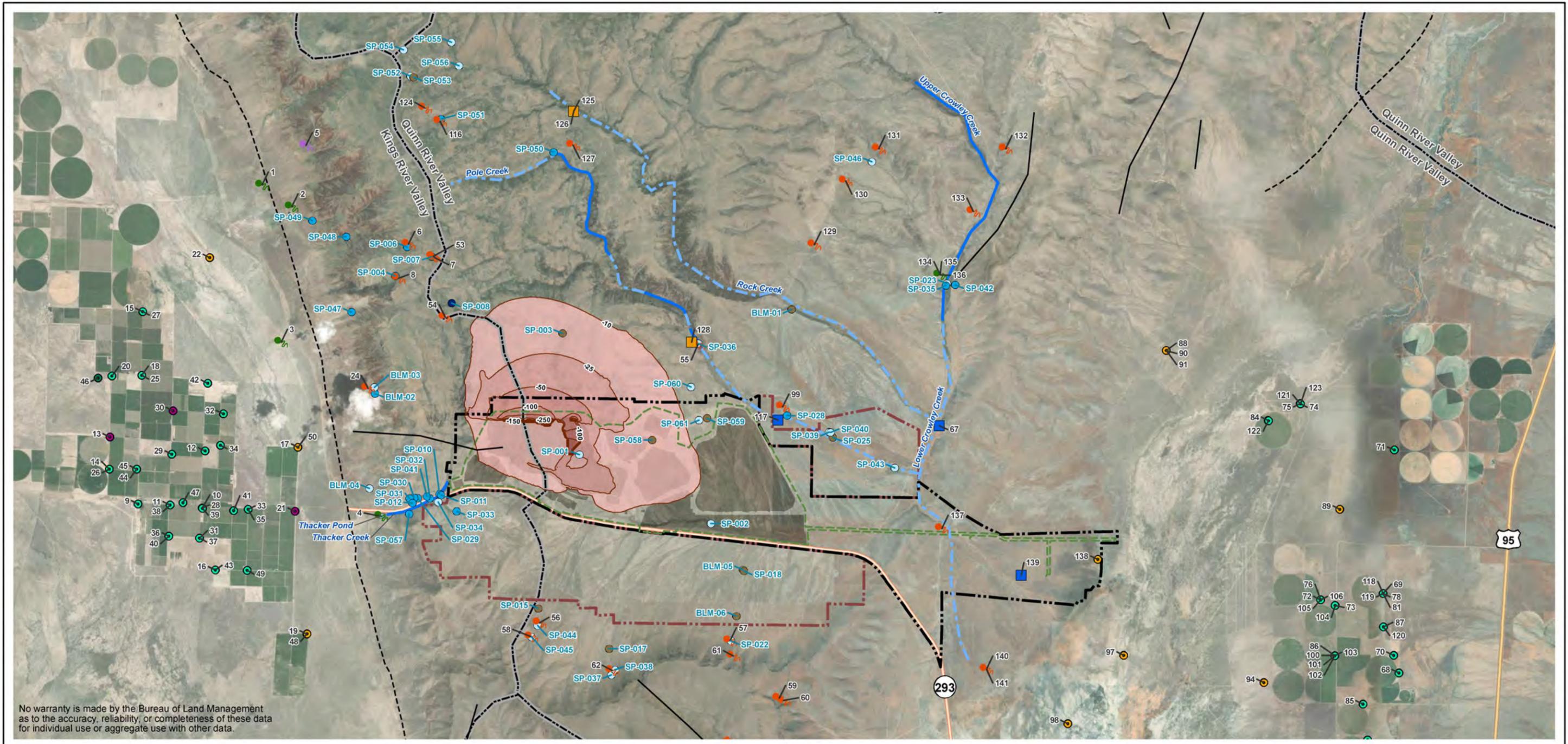


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**Figure 4.3-6**  
**Predicted Groundwater Drawdown - Proposed Action (100-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Mining Facilities
- U.S. Highway
- State Highway

- Hydrographic Basin Boundary
- Perennial Stream
- Ephemeral Stream
- Lake or Pond
- Normal Fault (Dashed where Concealed)
- Groundwater Drawdown Contour (ft)

- Water Rights (21)**
- Spring - Irrigation
  - Spring - Stock Watering
  - Spring - Other
  - Stream - Irrigation
  - Stream - Stock Watering
  - Well - Other
  - Well - Irrigation
  - Well - Quasi-municipal
  - Well - Stock Watering

- Springs (SP-038)**
- Developed Spring
  - Perennial Spring
  - Ephemeral Spring
  - Dry Spring

- Groundwater Drawdown (ft)**
- 10 to -25
  - 25 to -50
  - 50 to -100
  - 100 to -150
  - 150 to -200
  - 200 to -250
  - 250 to -300
  - 300 to -350
  - 350 to -400



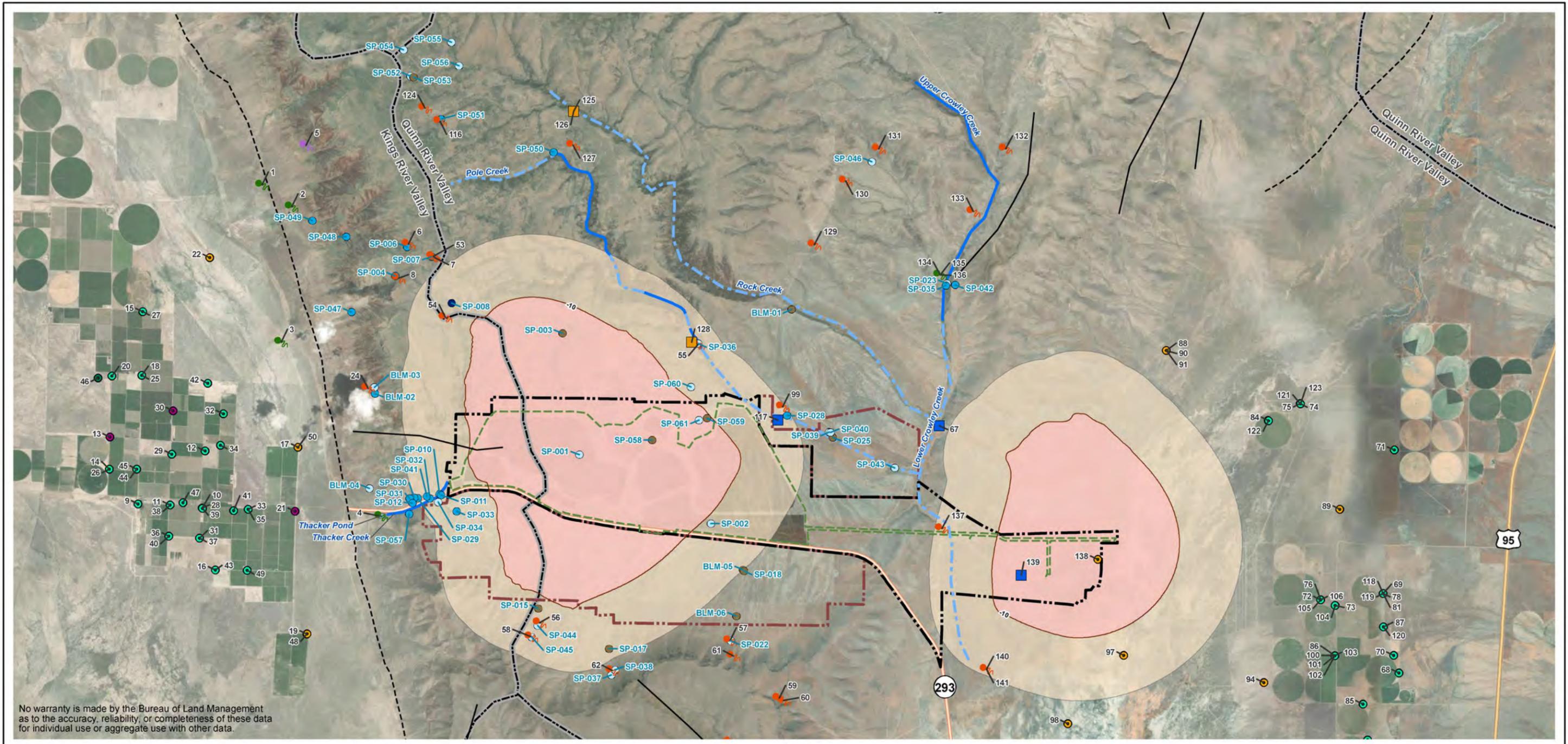
Source: ESRI 2020; Piteau 2020, NDWR 2020.



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Date: 10/6/2020

**Figure 4.3-7**  
**Predicted Groundwater Drawdown - Proposed Action (300-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- |                                   |                                       |                          |                         |
|-----------------------------------|---------------------------------------|--------------------------|-------------------------|
| PoO Boundary                      | Hydrographic Basin Boundary           | <b>Water Rights (21)</b> | <b>Springs (SP-038)</b> |
| Proposed Exploration PoO Boundary | Perennial Stream                      | Spring - Irrigation      | Developed Spring        |
| Disturbance Area Boundary         | Ephemeral Stream                      | Spring - Stock Watering  | Perennial Spring        |
| Mining Facilities                 | Lake or Pond                          | Spring - Other           | Ephemeral Spring        |
| U.S. Highway                      | Normal Fault (Dashed where Concealed) | Stream - Irrigation      | Dry Spring              |
| State Highway                     | Groundwater Drawdown Contour (ft)     | Stream - Stock Watering  |                         |
|                                   | <b>Groundwater Drawdown (ft)</b>      | Well - Other             |                         |
|                                   | > -10                                 | Well - Irrigation        |                         |
|                                   | 1-mi buffer of Max Drawdown           | Well - Quasi-municipal   |                         |
|                                   |                                       | Well - Stock Watering    |                         |

Source: ESRI 2020; Piteau 2020, NDWR 2020.



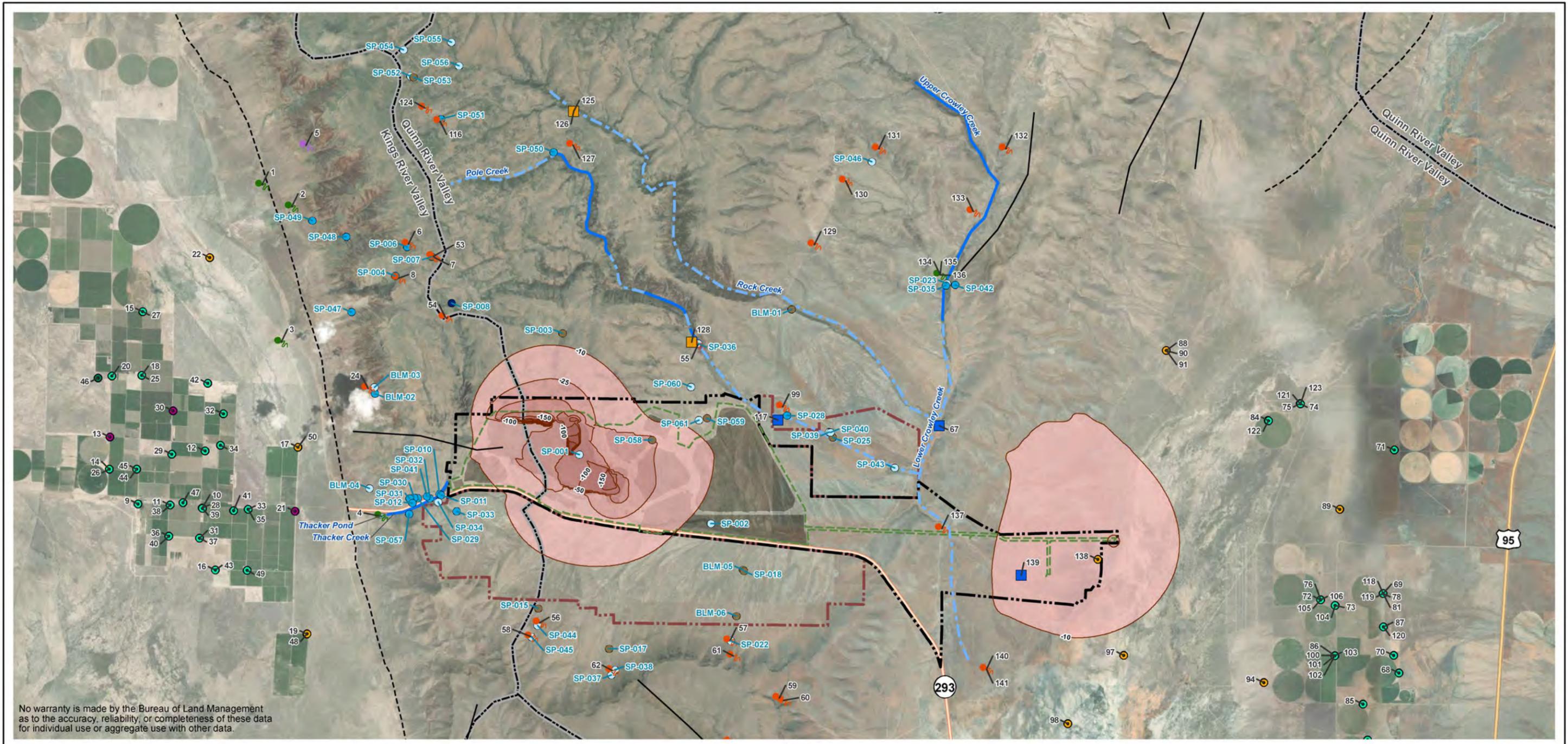
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Date: 10/6/2020



**Figure 4.3-8**  
**Predicted Maximum Extent of the 10-Foot Drawdown Contour - Proposed Action**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

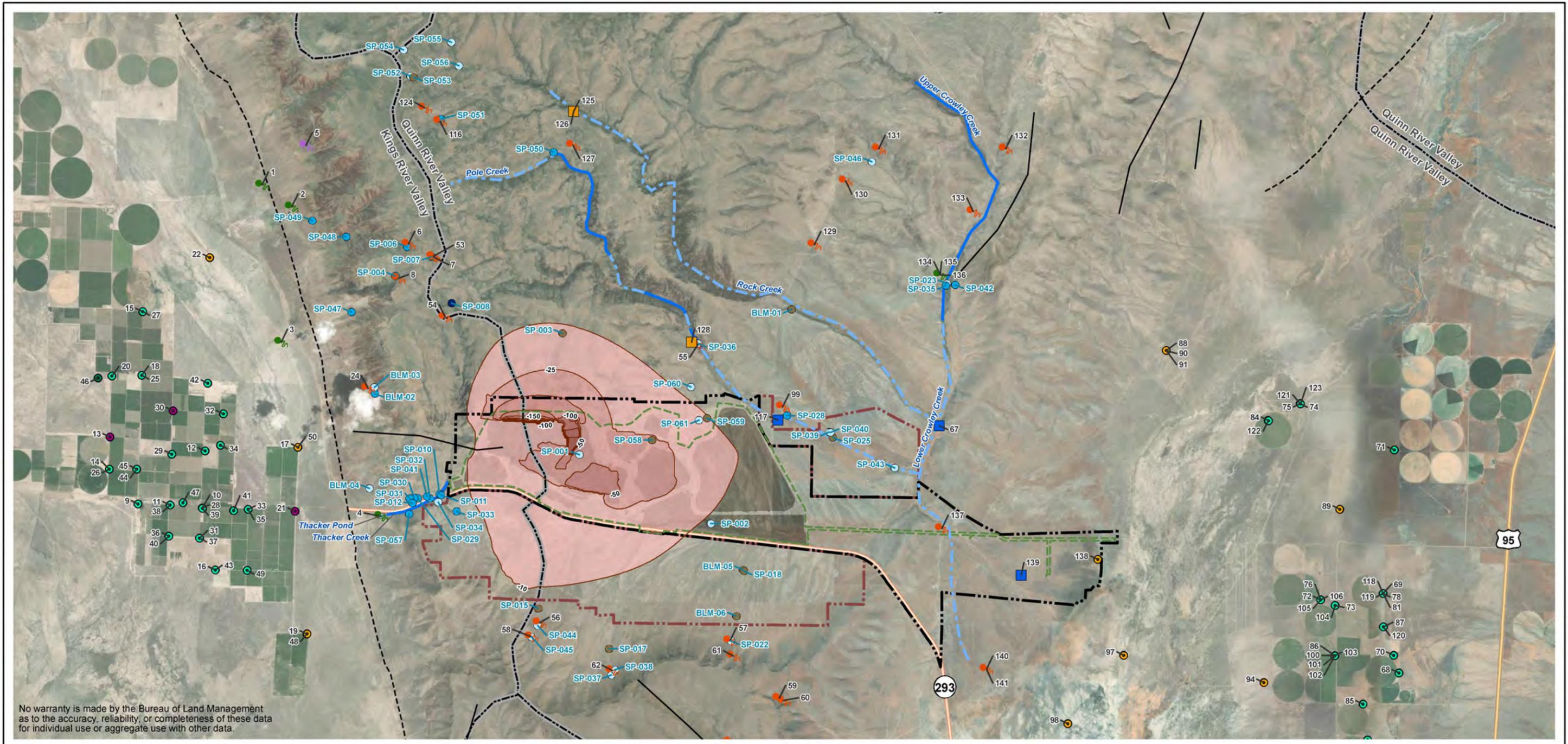


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
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Date: 10/6/2020

**Figure 4.3-9**  
**Predicted Groundwater Drawdown - Partial Pit Backfill Alternative (End of Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<p><b>Water Rights (21)</b></p> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<p><b>Springs (SP-038)</b></p> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<p><b>Groundwater Drawdown (ft)</b></p> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

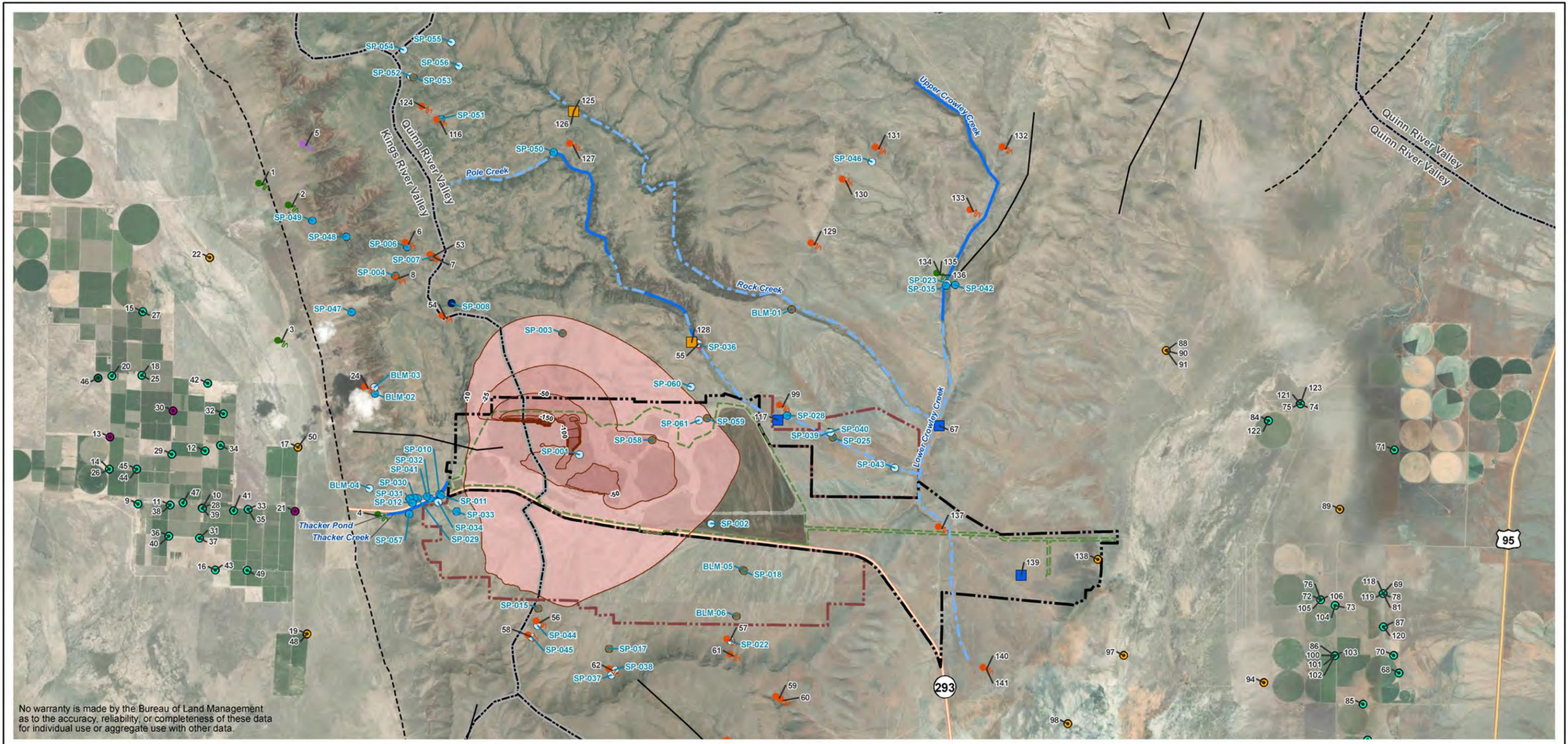


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
5100 E Winnemucca Blvd, Winnemucca, NV

Date: 10/6/2020

**Figure 4.3-10**  
**Predicted Groundwater Drawdown - Partial Pit Backfill Alternative (25-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

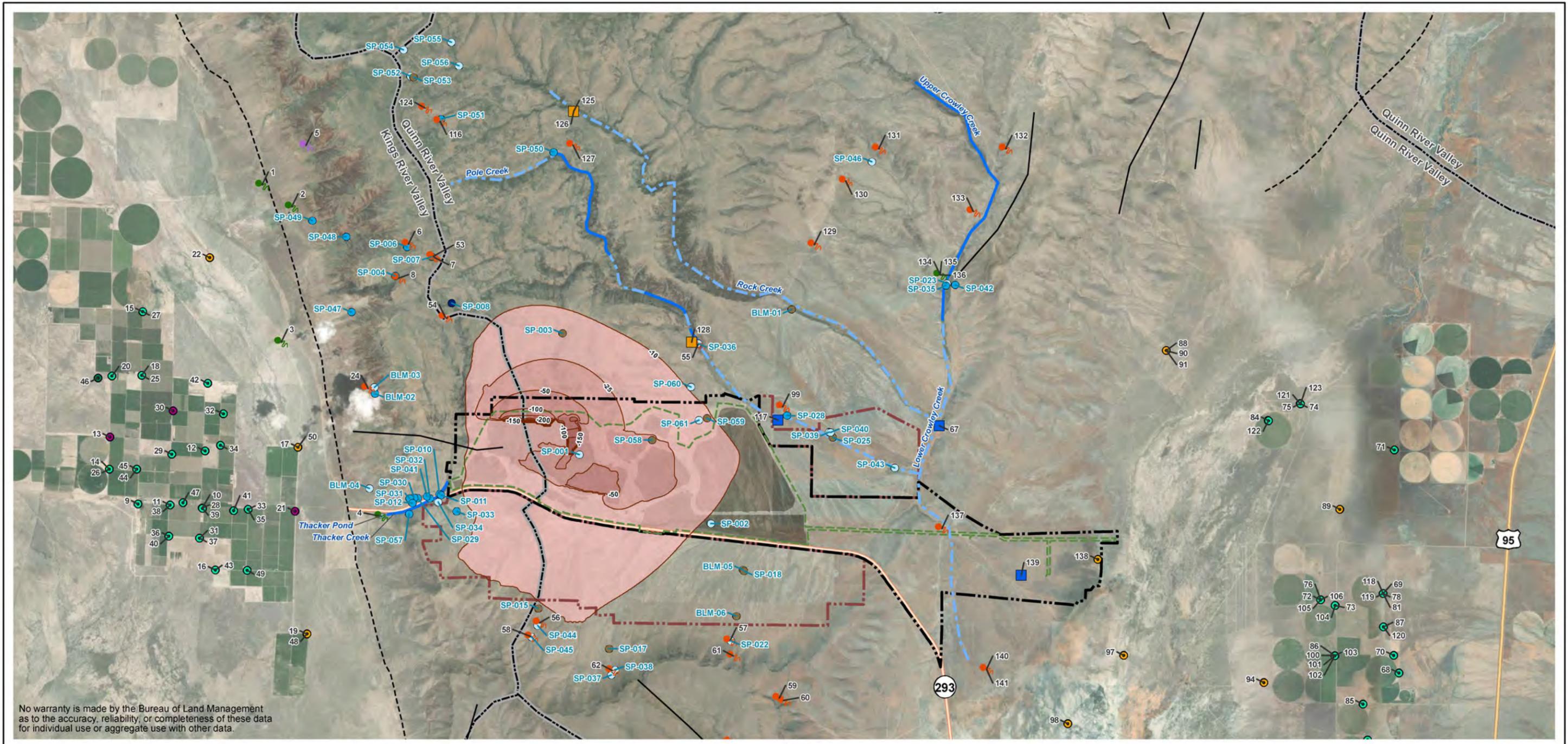


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
5100 E Winnemucca Blvd, Winnemucca, NV

Date: 10/6/2020

**Figure 4.3-11**  
**Predicted Groundwater Drawdown - Partial Pit Backfill Alternative (50-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

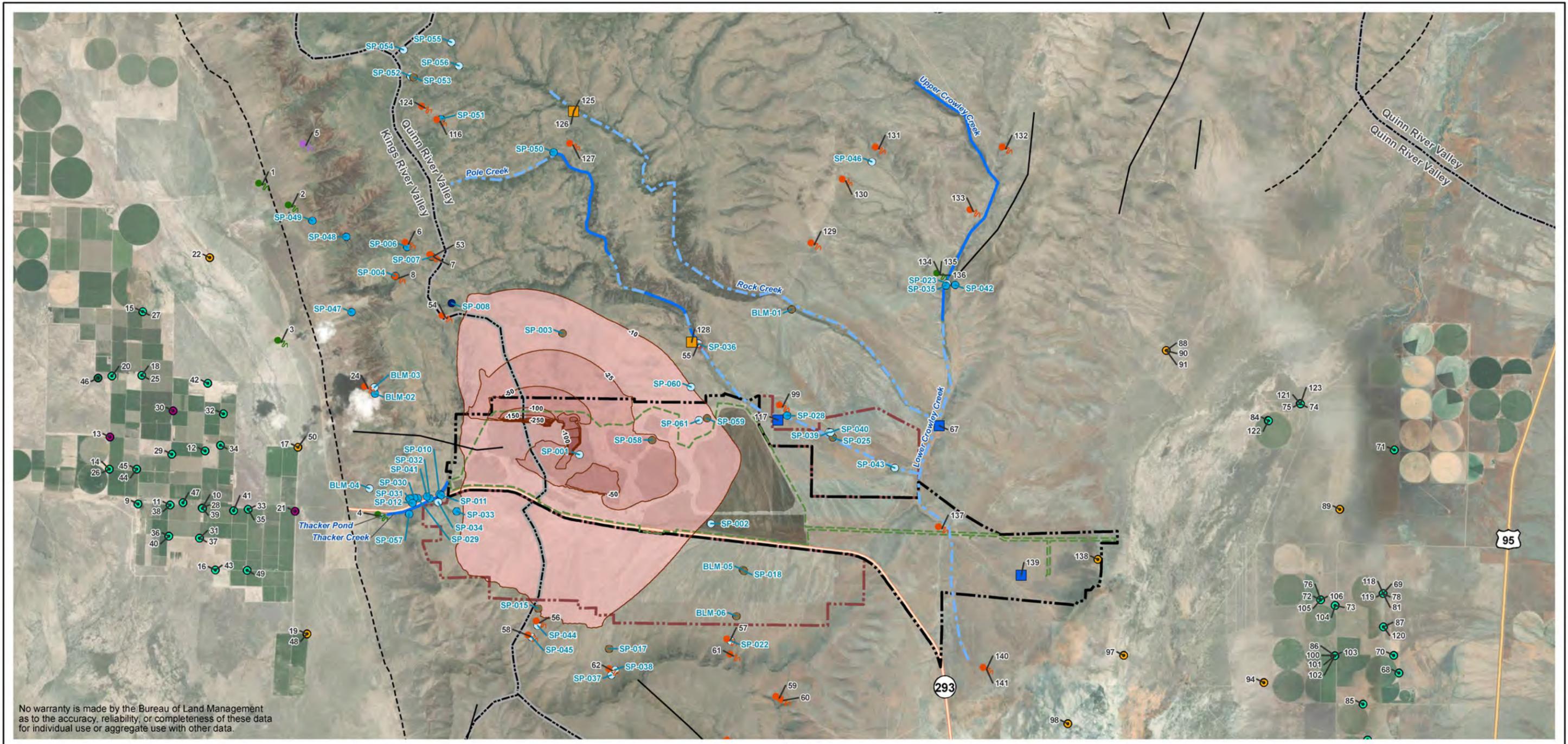


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
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Date: 10/6/2020

**Figure 4.3-12**  
**Predicted Groundwater Drawdown - Partial Pit Backfill Alternative (100-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

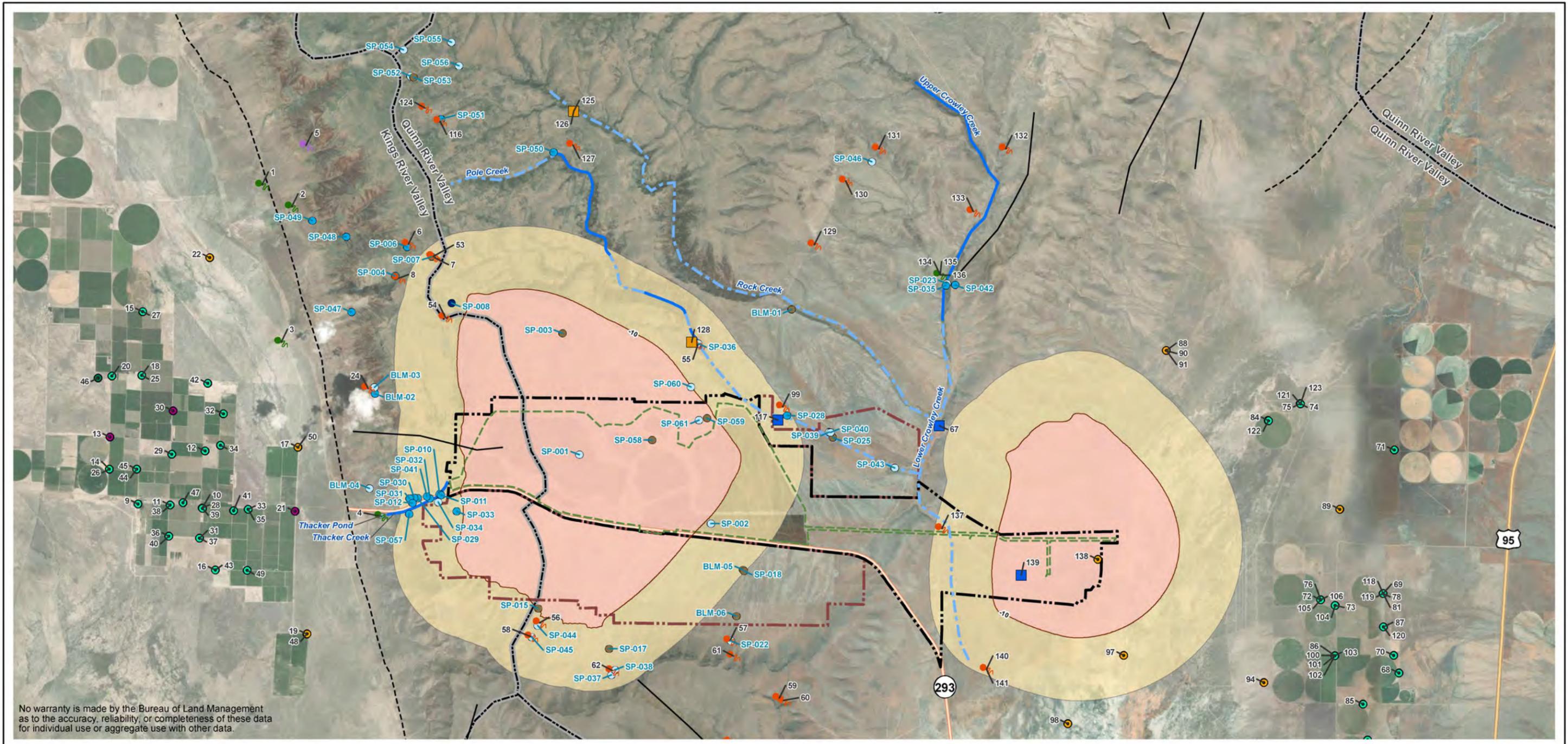


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
5100 E Winnemucca Blvd, Winnemucca, NV

Date: 10/6/2020

**Figure 4.3-13**  
**Predicted Groundwater Drawdown - Partial Pit Backfill Alternative (300-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- |                                   |                                       |                          |                         |
|-----------------------------------|---------------------------------------|--------------------------|-------------------------|
| PoO Boundary                      | Hydrographic Basin Boundary           | <b>Water Rights (21)</b> | <b>Springs (SP-038)</b> |
| Proposed Exploration PoO Boundary | Perennial Stream                      | Spring - Irrigation      | Developed Spring        |
| Disturbance Area Boundary         | Ephemeral Stream                      | Spring - Stock Watering  | Perennial Spring        |
| Mining Facilities                 | Lake or Pond                          | Spring - Other           | Ephemeral Spring        |
| U.S. Highway                      | Normal Fault (Dashed where Concealed) | Stream - Irrigation      | Dry Spring              |
| State Highway                     | Groundwater Drawdown Contour (ft)     | Stream - Stock Watering  |                         |
|                                   | <b>Groundwater Drawdown (ft)</b>      | Well - Other             |                         |
|                                   | > -10                                 | Well - Irrigation        |                         |
|                                   | 1 mi Buffer of Max Drawdown           | Well - Quasi-municipal   |                         |
|                                   |                                       | Well - Stock Watering    |                         |

Source: ESRI 2020; Piteau 2020, NDWR 2020.

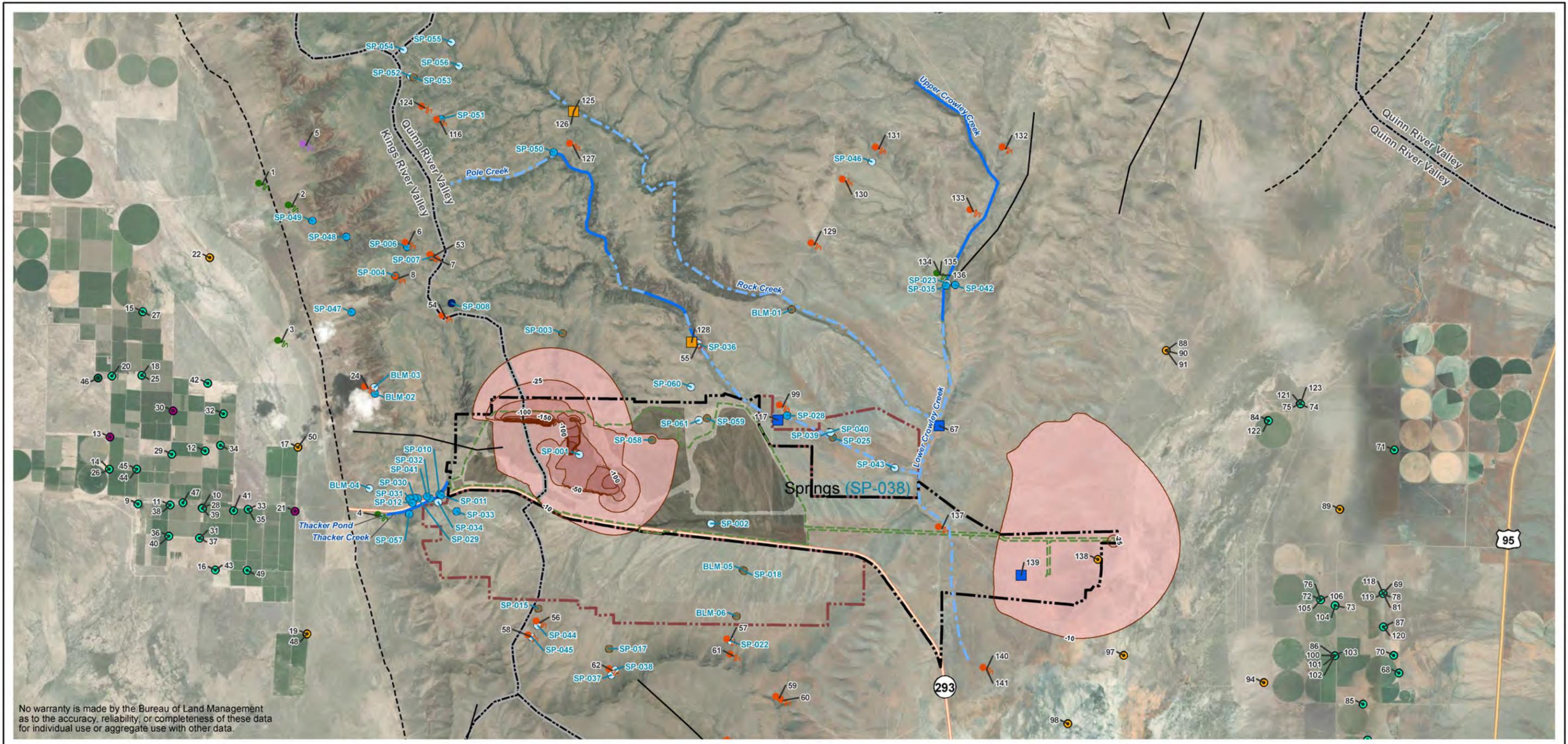


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Date: 10/6/2020



**Figure 4.3-14**  
**Predicted Maximum Extent of the 10-Foot Drawdown Contour - Partial Pit Backfill Alternative**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Mining Facilities
- U.S. Highway
- State Highway

- Hydrographic Basin Boundary
- Perennial Stream
- Ephemeral Stream
- Lake or Pond
- Normal Fault (Dashed where Concealed)
- Groundwater Drawdown Contour (ft)

- Water Rights (21)**
- Spring - Irrigation
  - Spring - Stock Watering
  - Spring - Other
  - Stream - Irrigation
  - Stream - Stock Watering
  - Well - Other
  - Well - Irrigation
  - Well - Quasi-municipal
  - Well - Stock Watering

- Springs (SP-038)**
- Developed Spring
  - Perennial Spring
  - Ephemeral Spring
  - Dry Spring

- Groundwater Drawdown (ft)**
- 10 to -25
  - 25 to -50
  - 50 to -100
  - 100 to -150
  - 150 to -200
  - 200 to -250
  - 250 to -300
  - 300 to -350
  - 350 to -400
  - 400 to -450



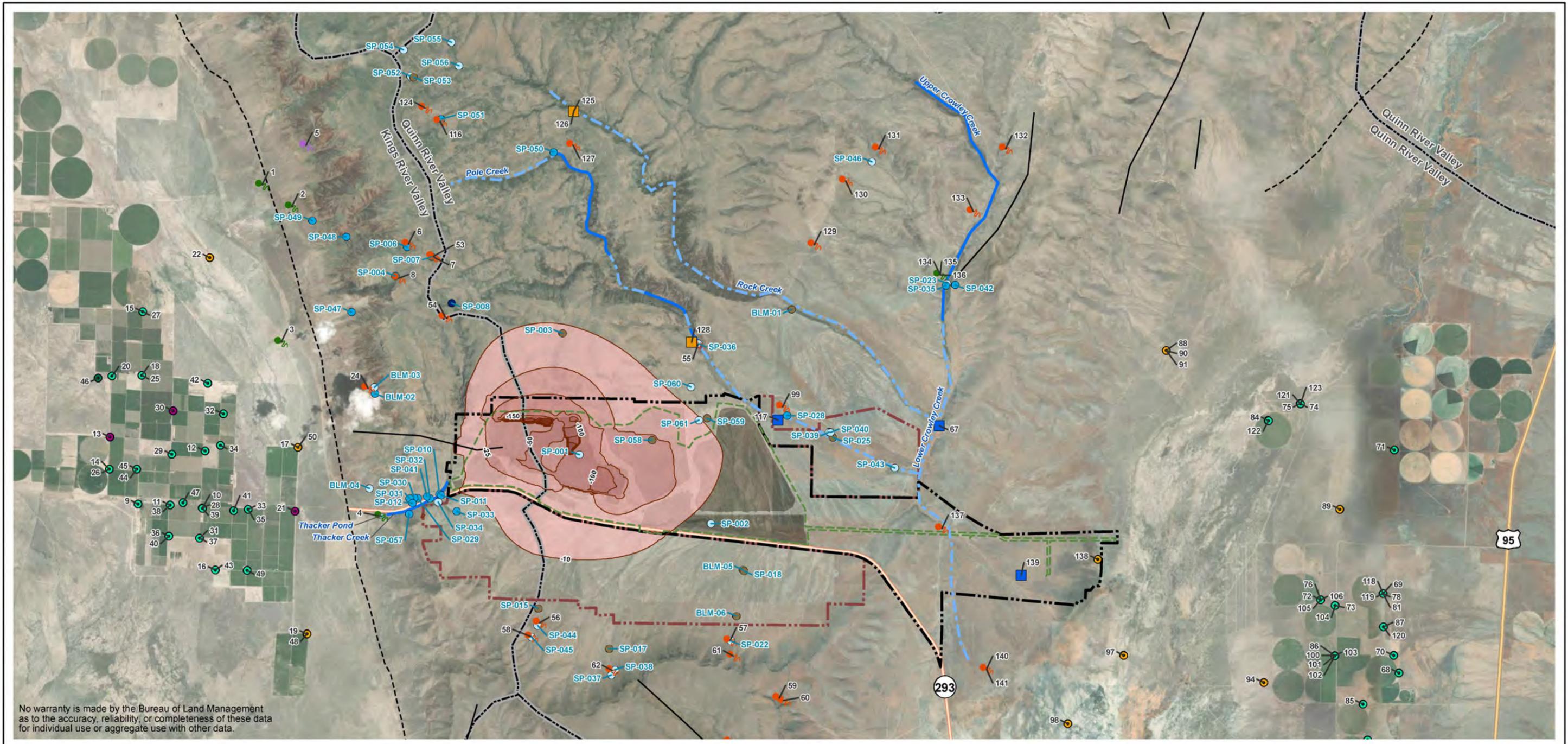
Source: ESRI 2020; Piteau 2020, NDWR 2020.



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Date: 10/6/2020

**Figure 4.3-15**  
**Predicted Groundwater Drawdown - No Pit Backfill Alternative (End of Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

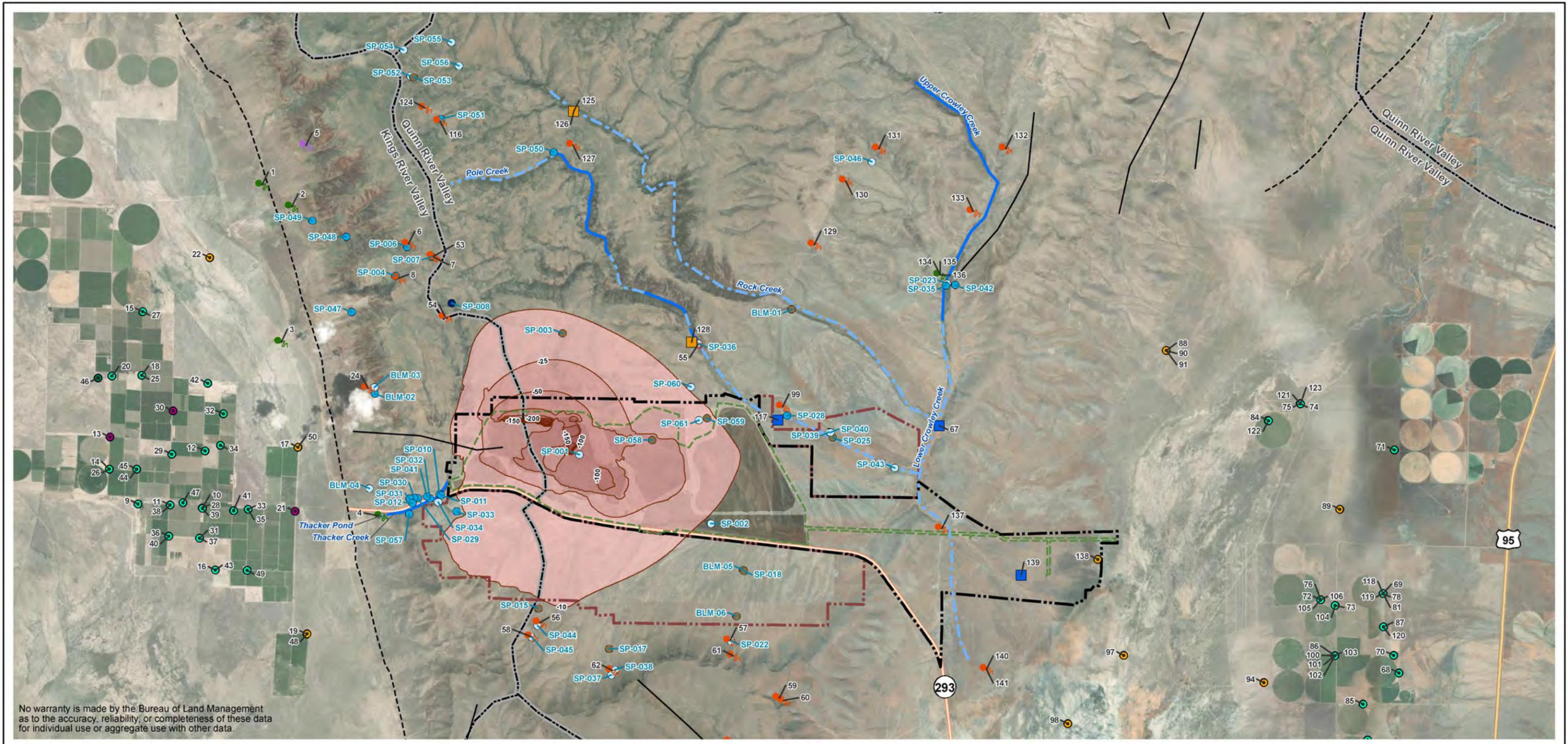


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
5100 E Winnemucca Blvd, Winnemucca, NV

Date: 10/6/2020

**Figure 4.3-16**  
**Predicted Groundwater Drawdown - No Pit Backfill Alternative (25-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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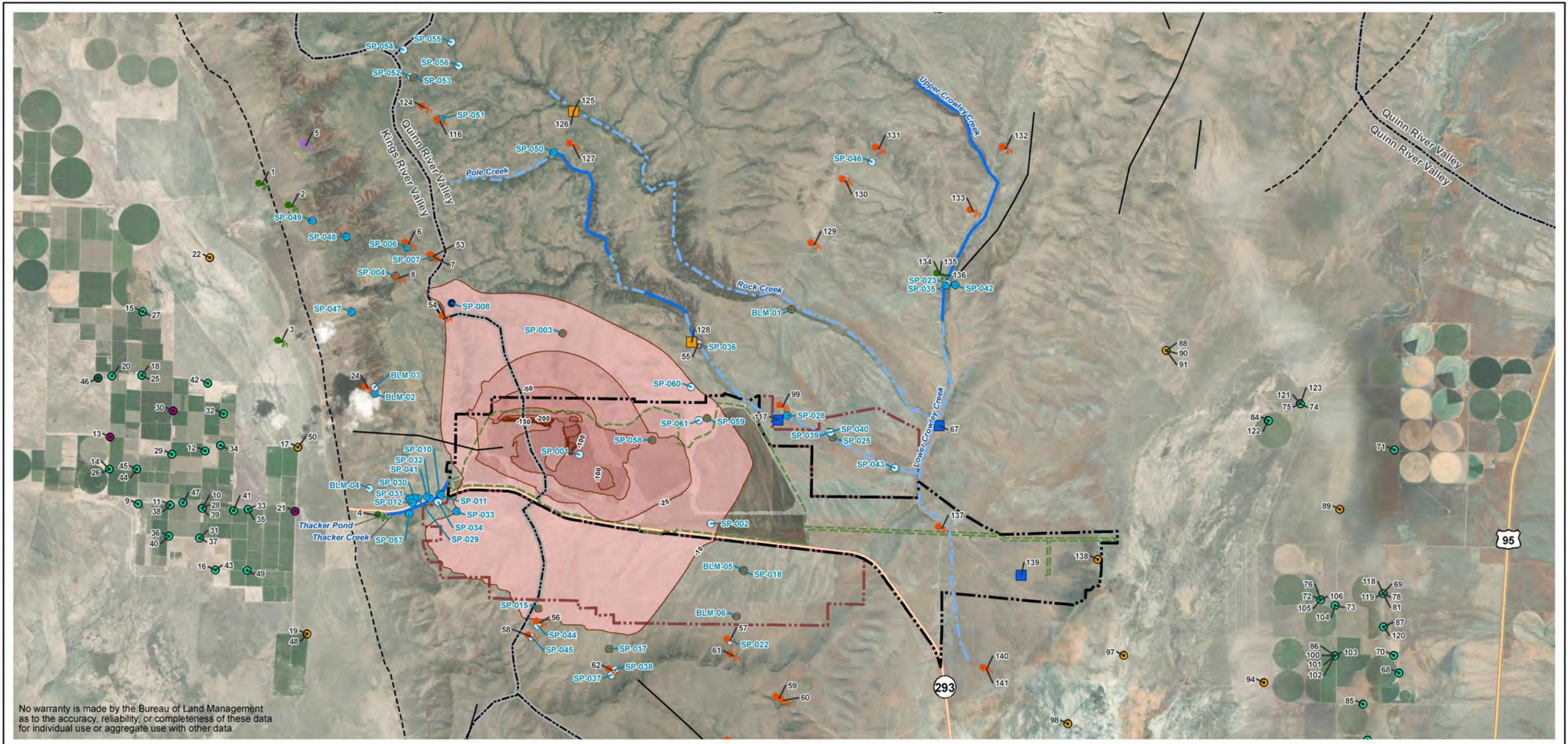
Source: ESRI 2020; Piteau 2020, NDWR 2020.



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Date: 10/6/2020

**Figure 4.3-17**  
**Predicted Groundwater Drawdown - No Pit Backfill Alternative (50-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

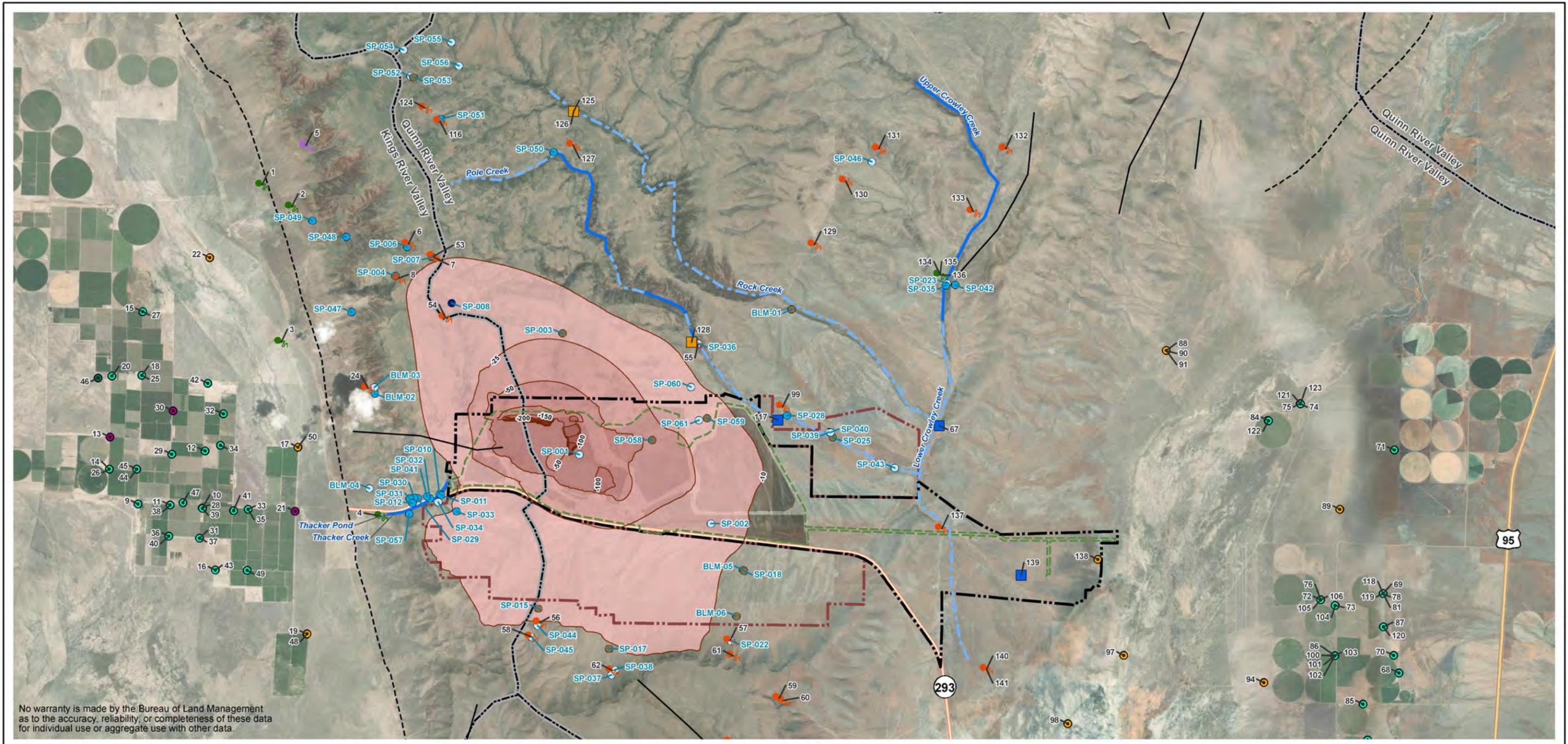


0 0.5 1 Miles

Bureau of Land Management, Winnemucca District  
5100 E Winnemucca Blvd, Winnemucca, NV

Date: 10/6/2020

**Figure 4.3-18**  
**Predicted Groundwater Drawdown - No Pit Backfill Alternative (100-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

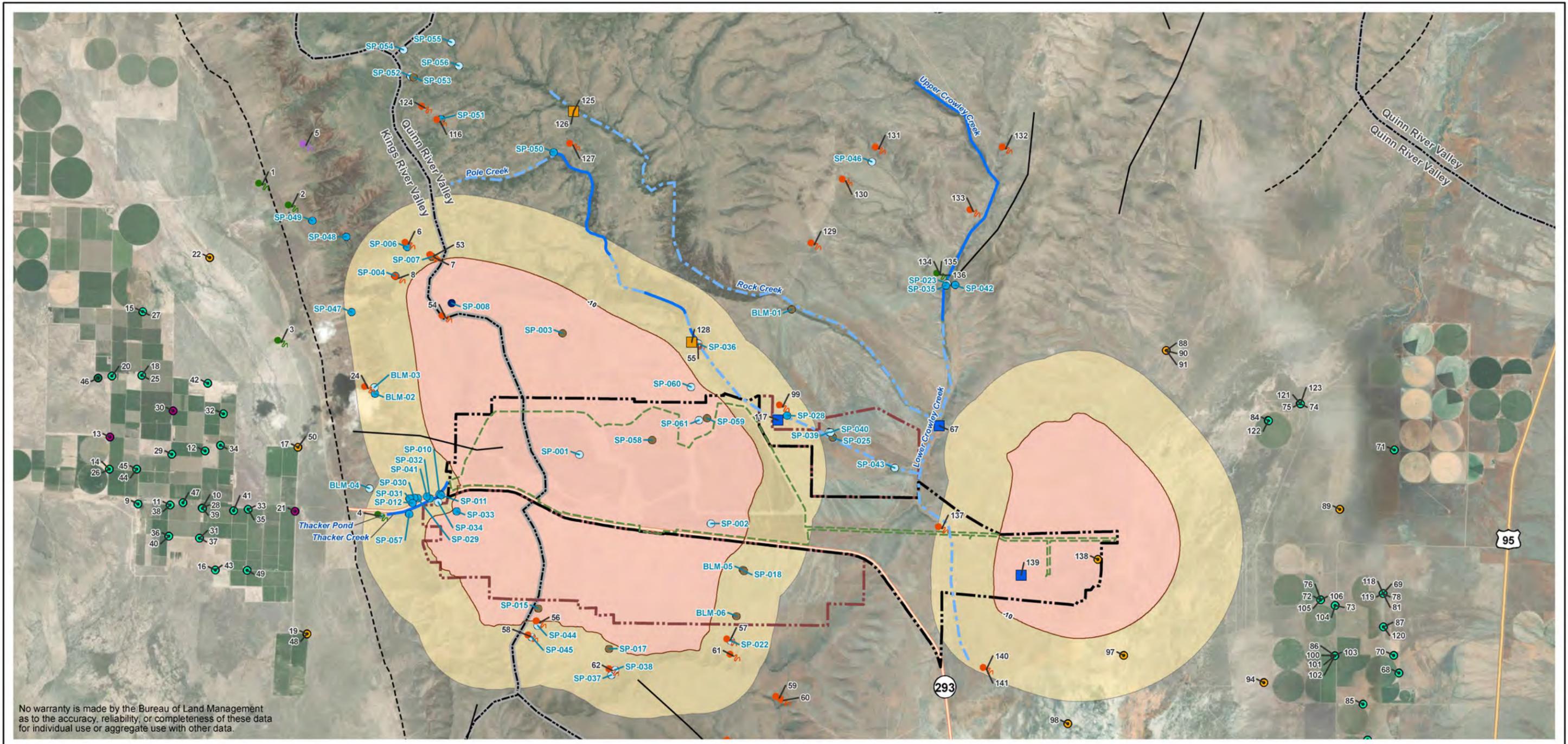
<ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul>	<ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul>	<b>Water Rights (21)</b> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul>	<b>Springs (SP-038)</b> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul>	<b>Groundwater Drawdown (ft)</b> <ul style="list-style-type: none"> <li> -10 to -25</li> <li> -25 to -50</li> <li> -50 to -100</li> <li> -100 to -150</li> <li> -150 to -200</li> <li> -200 to -250</li> <li> -250 to -300</li> <li> -300 to -350</li> <li> -350 to -400</li> <li> -400 to -450</li> </ul>	
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Source: ESRI 2020; Piteau 2020, NDWR 2020.

0 0.5 1 Miles  
 Bureau of Land Management, Winnemucca District  
 5100 E Winnemucca Blvd, Winnemucca, NV

Date: 10/6/2020

**Figure 4.3-19**  
**Predicted Groundwater Drawdown - No Pit Backfill Alternative (300-Years Post-Mining)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- |  |   |   |   |
|--|---|---|---|
| <ul style="list-style-type: none"> <li> PoO Boundary</li> <li> Proposed Exploration PoO Boundary</li> <li> Disturbance Area Boundary</li> <li> Mining Facilities</li> <li> U.S. Highway</li> <li> State Highway</li> </ul> | <ul style="list-style-type: none"> <li> Hydrographic Basin Boundary</li> <li> Perennial Stream</li> <li> Ephemeral Stream</li> <li> Lake or Pond</li> <li> Normal Fault (Dashed where Concealed)</li> <li> Groundwater Drawdown Contour (ft)</li> </ul> <p><b>Groundwater Drawdown (ft)</b></p> <ul style="list-style-type: none"> <li> &gt; -10</li> <li> 1-mi buffer of Max Drawdown</li> </ul> | <p><b>Water Rights (21)</b></p> <ul style="list-style-type: none"> <li> Spring - Irrigation</li> <li> Spring - Stock Watering</li> <li> Spring - Other</li> <li> Stream - Irrigation</li> <li> Stream - Stock Watering</li> <li> Well - Other</li> <li> Well - Irrigation</li> <li> Well - Quasi-municipal</li> <li> Well - Stock Watering</li> </ul> | <p><b>Springs (SP-038)</b></p> <ul style="list-style-type: none"> <li> Developed Spring</li> <li> Perennial Spring</li> <li> Ephemeral Spring</li> <li> Dry Spring</li> </ul> |
|--|---|---|---|

Source: ESRI 2020; Piteau 2020, NDWR 2020.

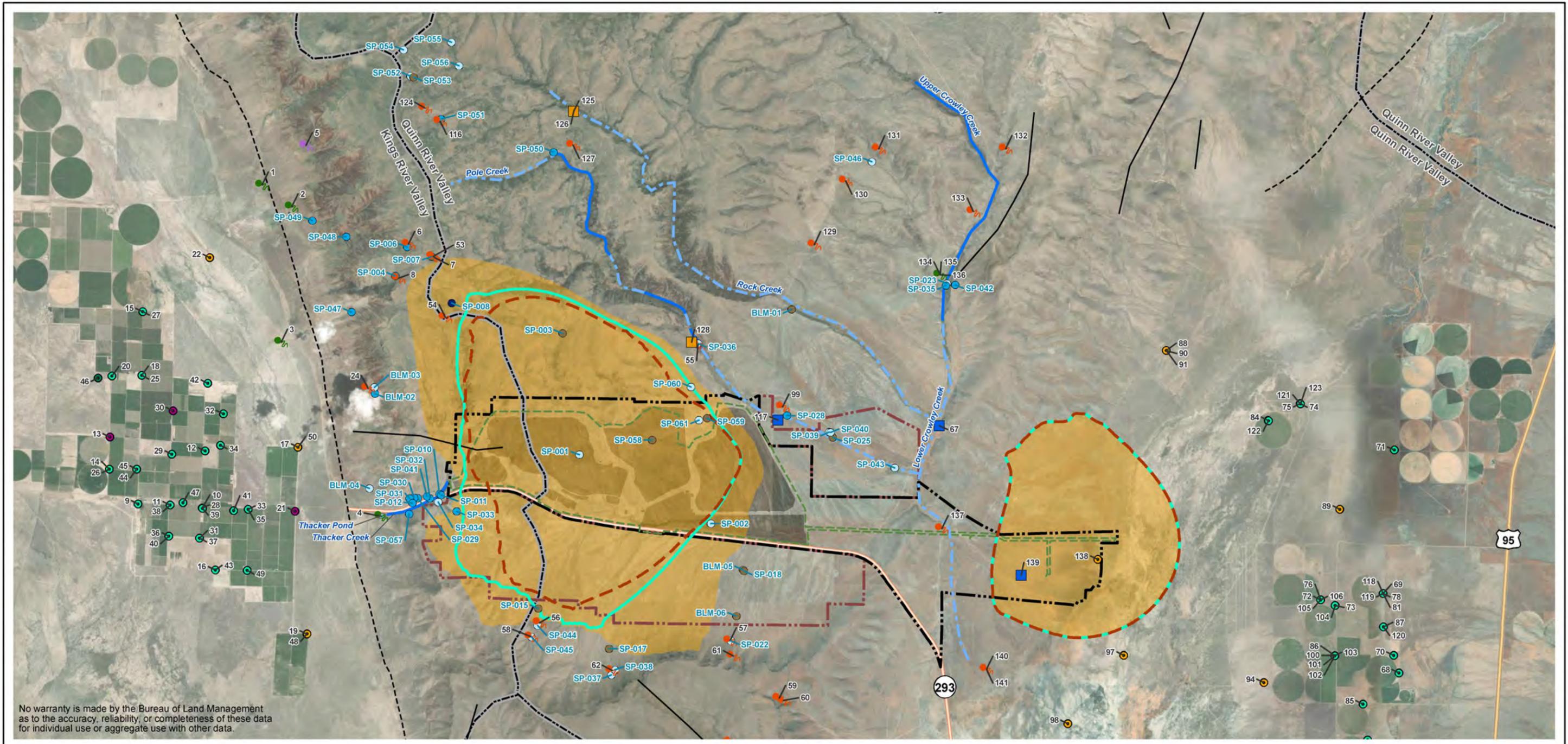


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**Figure 4.3-20**  
**Predicted Maximum Extent of the 10-Foot Drawdown Contour - No Backfill Alternative**



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- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Mining Facilities
- U.S. Highway
- State Highway
- Hydrographic Basin Boundary
- Perennial Stream
- Ephemeral Stream
- Lake or Pond
- Normal Fault (Dashed where Concealed)
- Alternative A - Maximum 10' Drawdown
- Alternative B - Maximum 10' Drawdown
- Alternative C - Maximum 10' Drawdown

- Water Rights (21)**
- Spring - Irrigation
  - Spring - Stock Watering
  - Spring - Other
  - Stream - Irrigation
  - Stream - Stock Watering
  - Well - Other
  - Well - Irrigation
  - Well - Quasi-municipal
  - Well - Stock Watering

- Springs (SP-038)**
- Developed Spring
  - Perennial Spring
  - Ephemeral Spring
  - Dry Spring



Source: ESRI 2020; Piteau 2020, NDWR 2020.

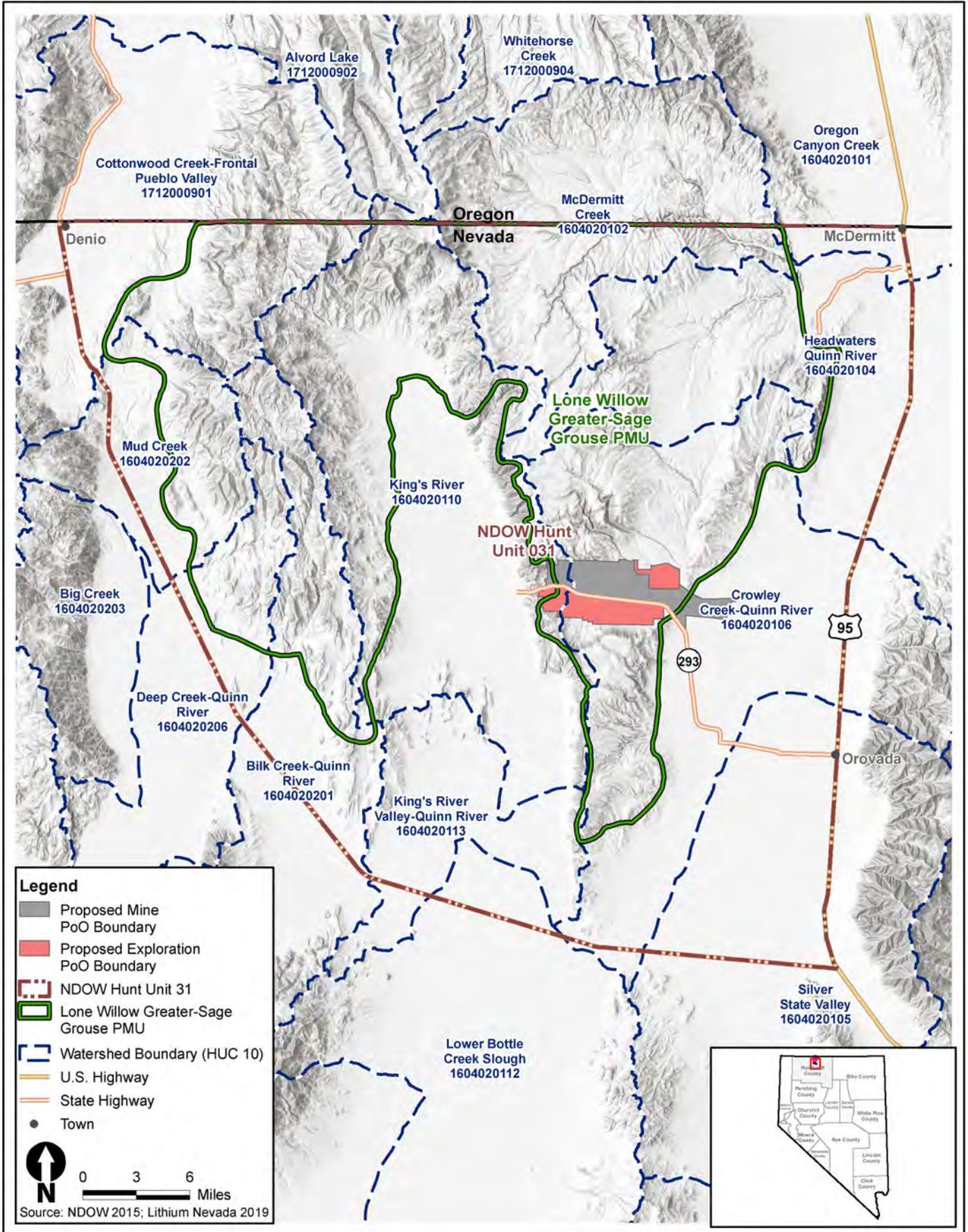


0 0.5 1  
Miles

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**Figure 4.3-21**  
**Predicted Maximum Extent of the 10-Foot Drawdown Contour- Alternative Comparison**

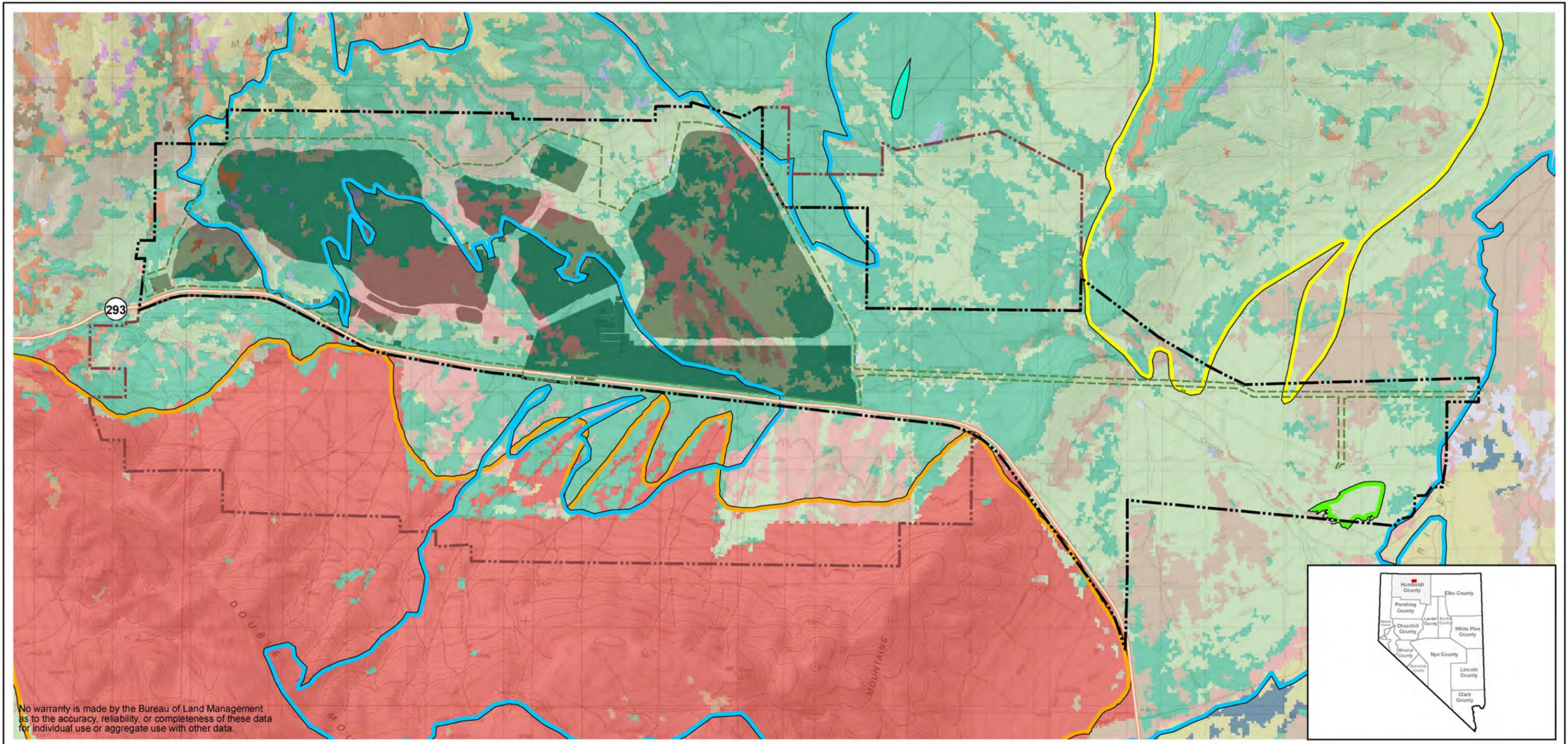


**Figure 4.5-1  
Biological Resources  
Cumulative Effects Study Area**



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Source: BLM 2020, USGS 2004; NatGeo 2013.

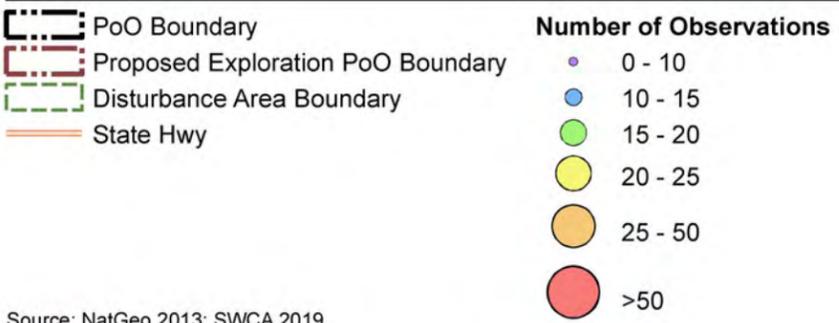
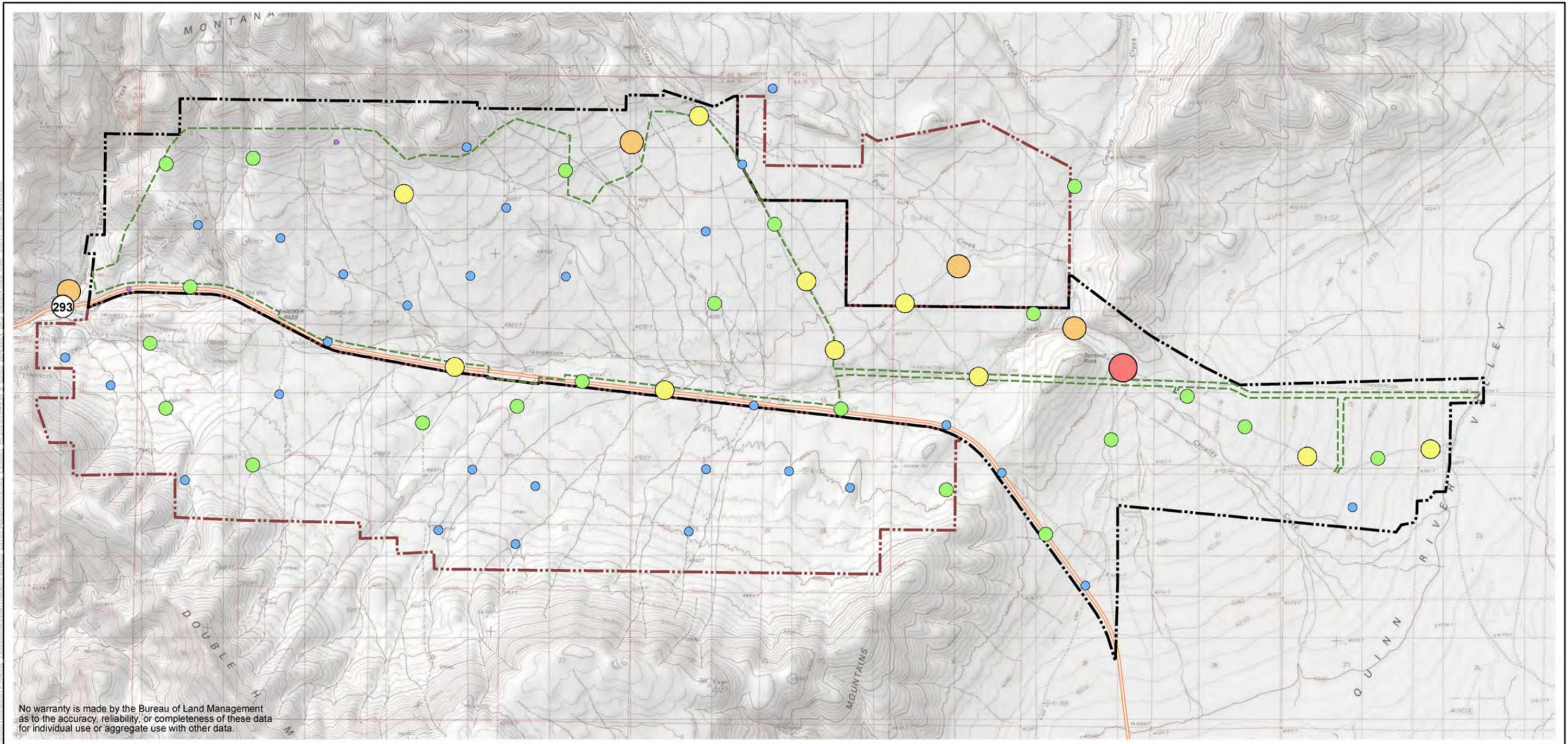



0 0.5 1 Miles

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**Figure 4.5-2**  
**Vegetation Cover**



Source: NatGeo 2013; SWCA 2019.



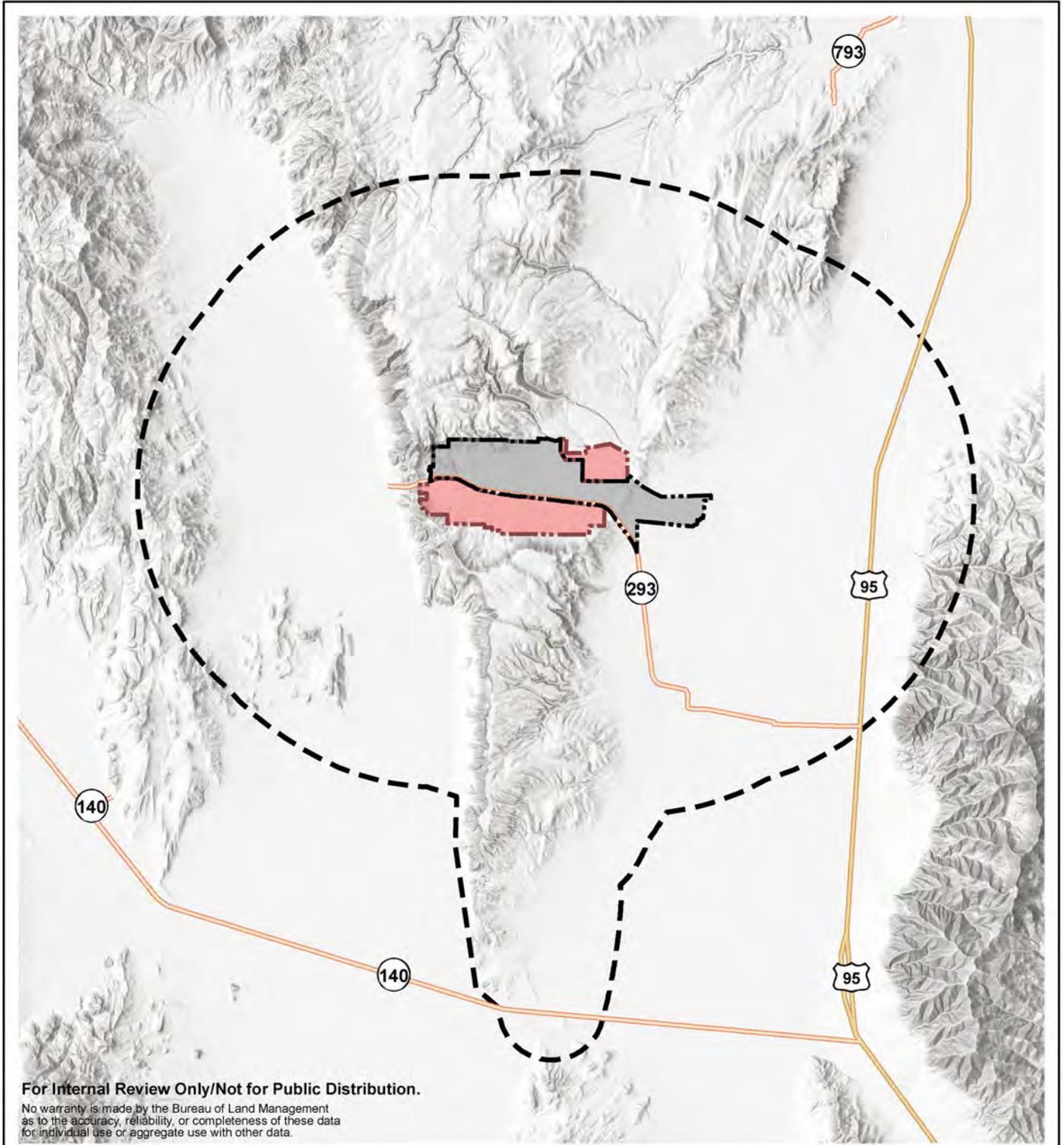

0 0.5 1 Miles

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**Figure 4-5.3**  
**Locations of Migratory Bird Density**



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-  PoO Boundary
-  Proposed Exploration
-  PoO Boundary
-  Raptor Survey Area
-  U.S. Highway
-  State Highway



Source: LNC 2019.

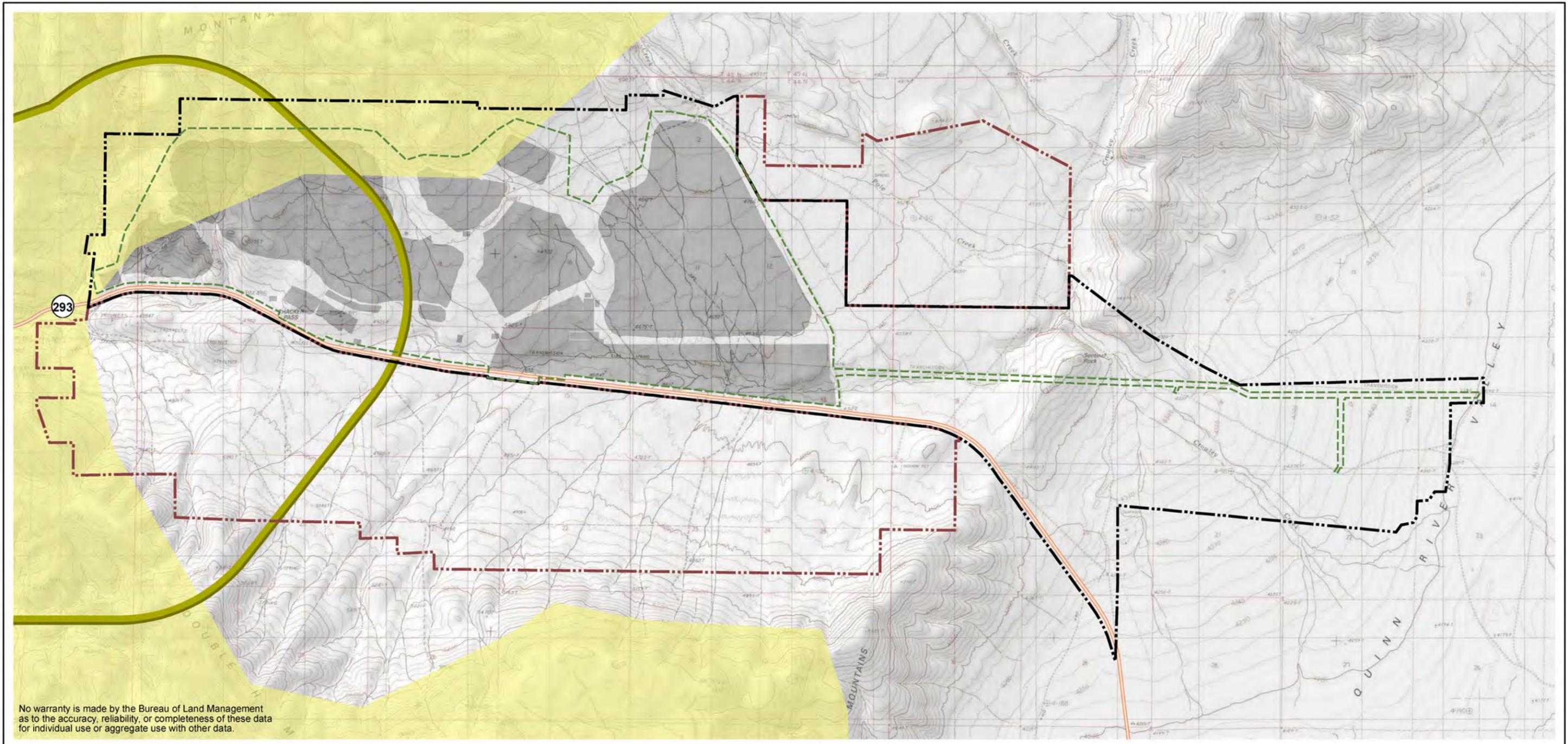


0 2.5 5 Miles

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**Figure 4.5-4  
Raptor Survey Area within 10 Miles**



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- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Mining Facilities
- State Highway
- California Bighorn Sheep Movement Corridors**
- Year-round Movements
- California Bighorn Sheep Distribution**
- Year-round



Source: NatGeo 2013; NDOW 2017.

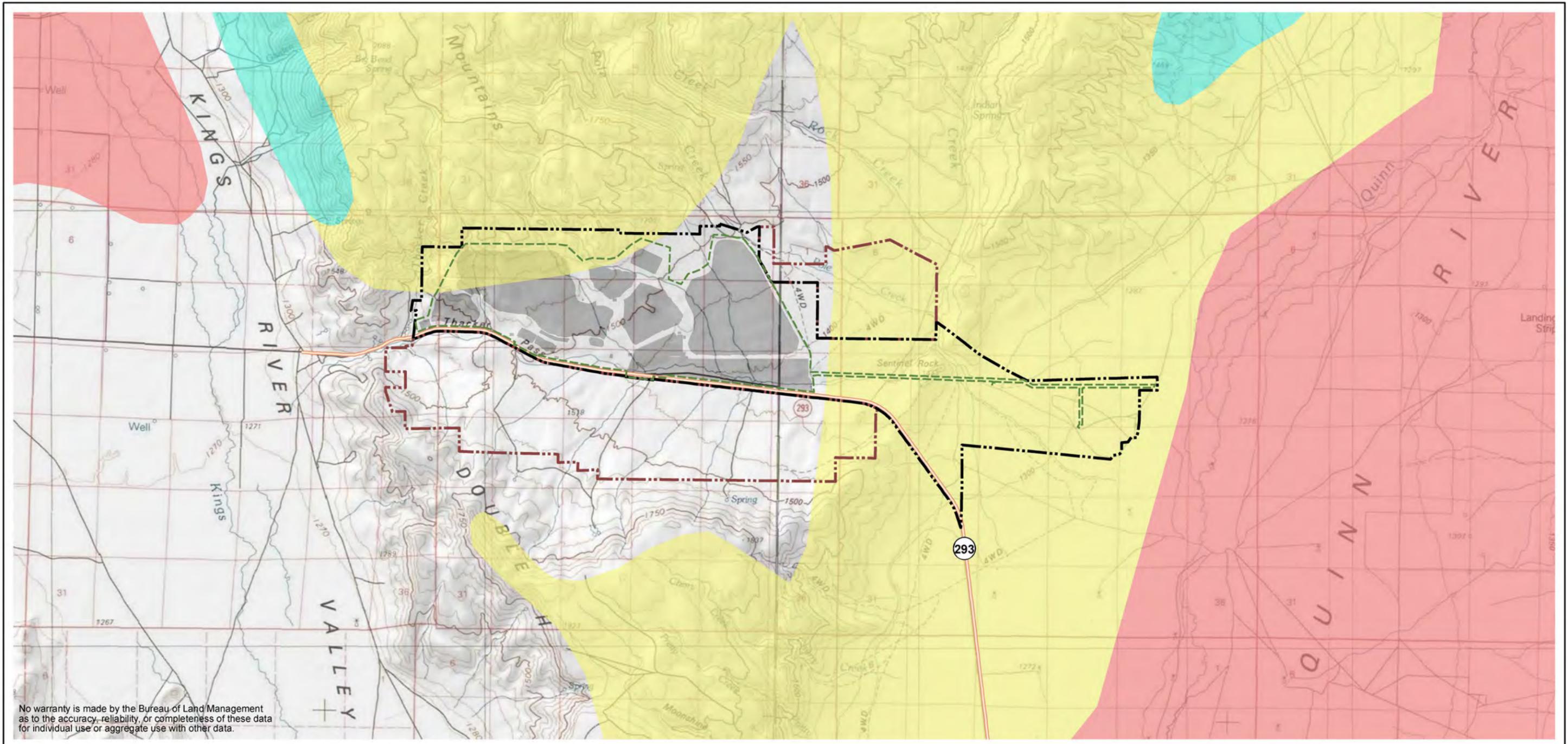


0 0.5 1 Miles

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**Figure 4.5-5**  
**NDOW Mapped Distributions for California Bighorn Sheep**

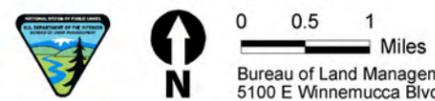


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- |                                   |                               |
|-----------------------------------|-------------------------------|
| PoO Boundary                      | <b>Mule Deer Distribution</b> |
| Proposed Exploration PoO Boundary | Agricultural                  |
| Disturbance Area Boundary         | Crucial Winter                |
| Mining Facilities                 | Year-round                    |
| State Highway                     |                               |



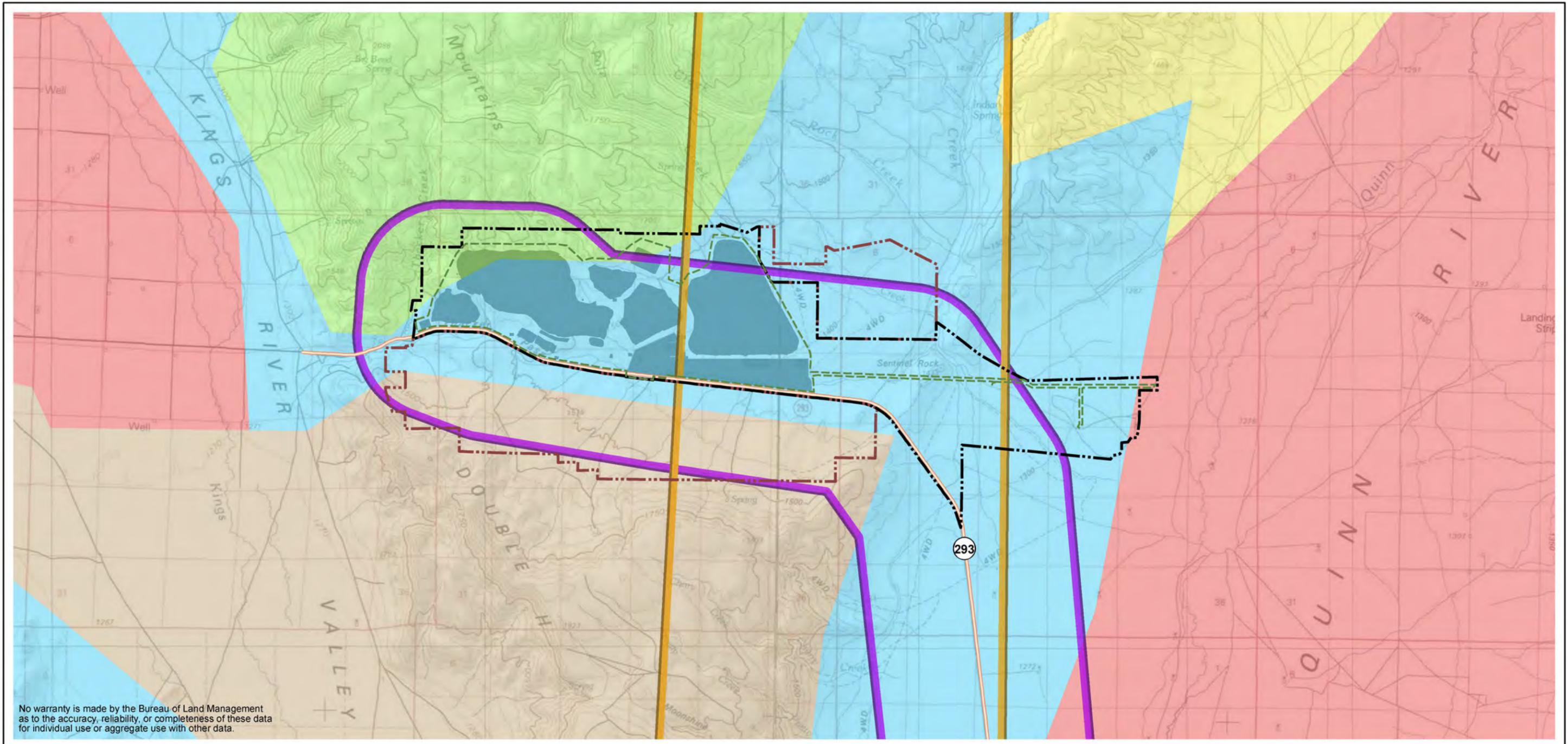
Source: NatGeo 2013; NDOW 2017.



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**Figure 4.5-6**  
**NDOW Mapped Distributions for Mule Deer**



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- |                                     |                               |
|-------------------------------------|-------------------------------|
| PoO Boundary                        | <b>Pronghorn Distribution</b> |
| Proposed Exploration PoO Boundary   | Agricultural                  |
| Disturbance Area Boundary           | Limited Use                   |
| Mining Facilities                   | Summer Range                  |
| State Highway                       | Winter Range                  |
| <b>Pronghorn Movement Corridors</b> | Year-round                    |
| Migration                           |                               |
| Daily Movements                     |                               |

Source: NatGeo 2013; NDOW 2017.



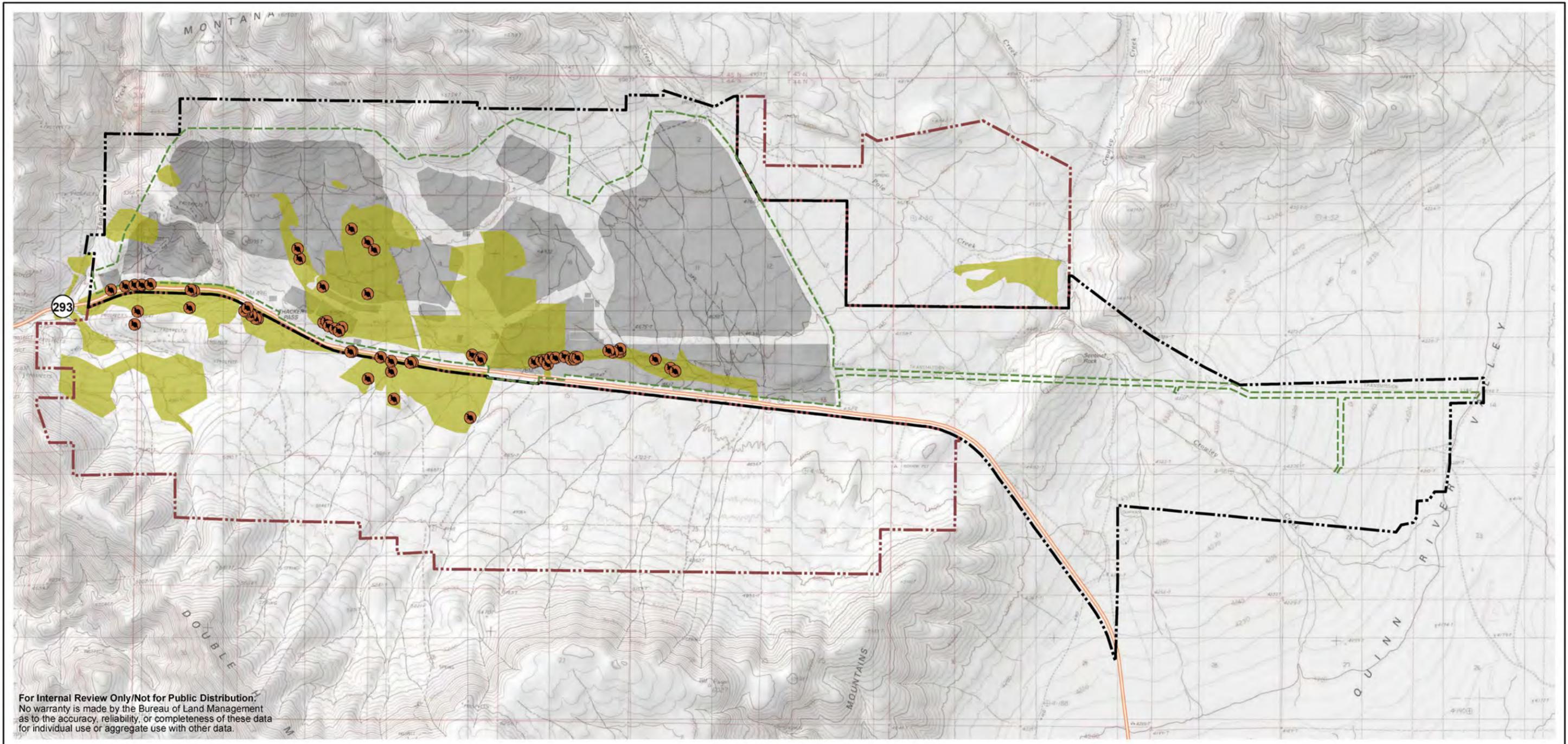
0 0.5 1 Miles

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**Figure 4.5-7**  
**NDOW Mapped Distributions for Pronghorn**



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- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Mining Facilities
- State Highway
- Pygmy Rabbit Habitat
- Historic/Inactive Pygmy Rabbit Burrow



Source: NatGeo 2013; SWCA 2018.

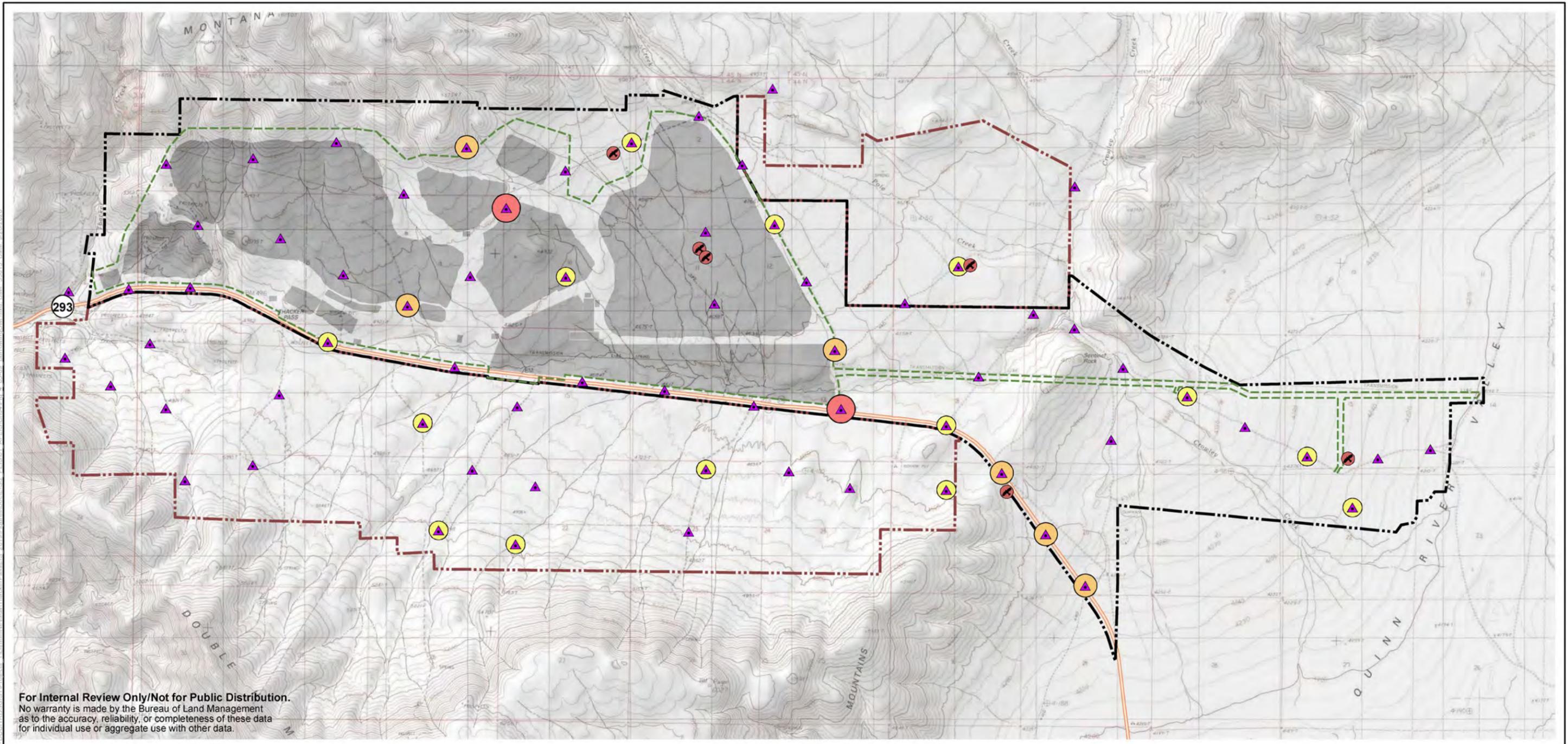


0 0.5 1 Miles

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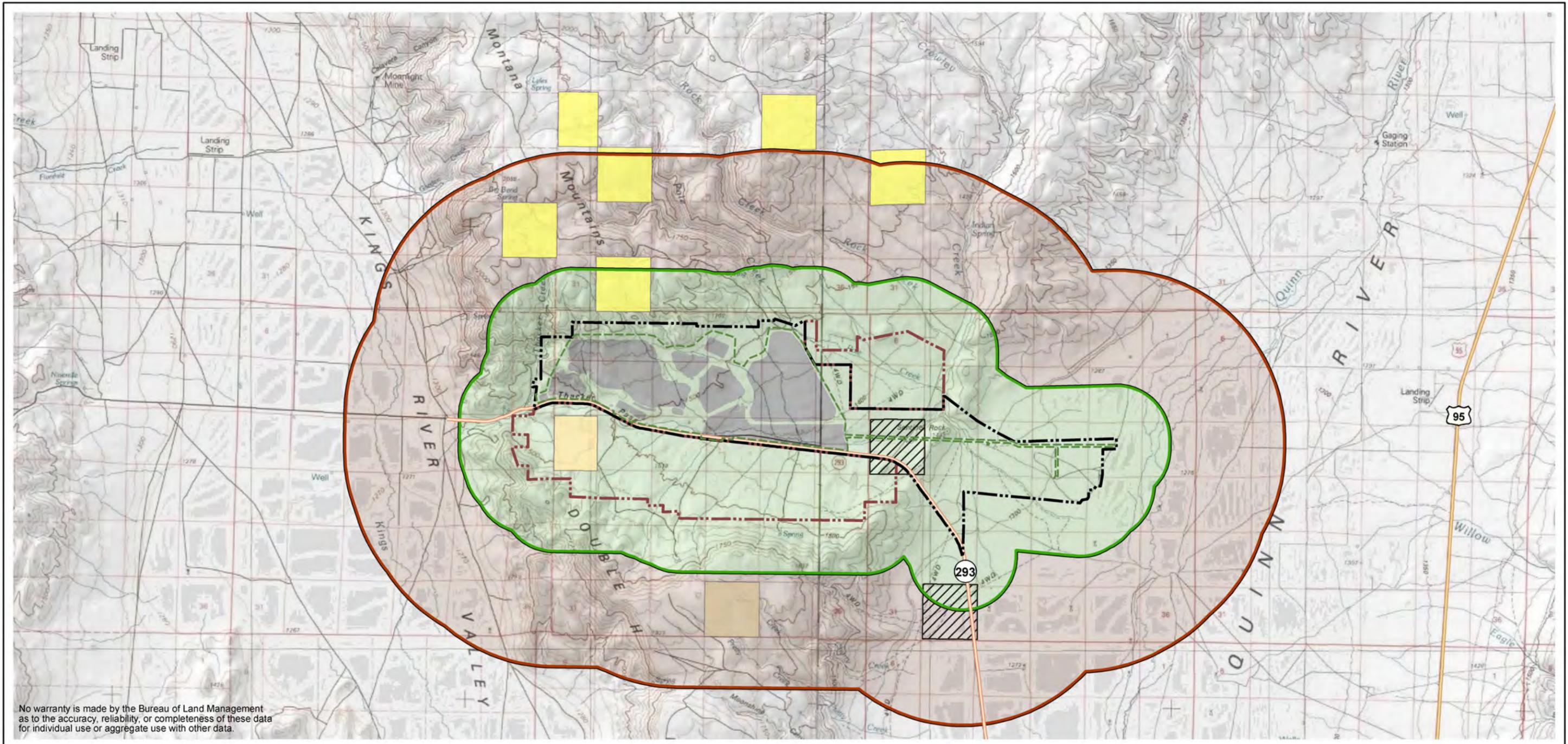
**Figure 4.5-8**  
**Delineated Pygmy Rabbit Habitat and Inactive Burrow Locations**



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**Figure 4.5-9**  
**Western Burrowing Owl observations**



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- |                                   |  |               |
|-----------------------------------|--|---------------|
| PoO Boundary                      | <b>Greater Sage-Grouse Lek Location by Section</b> | U.S. Highway  |
| Proposed Exploration PoO Boundary | Active   | State Highway |
| Disturbance Area Boundary         | Inactive   |               |
| Mining Facilities                 | Historic   |               |
| PoO Boundary Buffer (1-mile)      | Unknown  |               |
| PoO Boundary Buffer (3.1-mile)    |  |               |

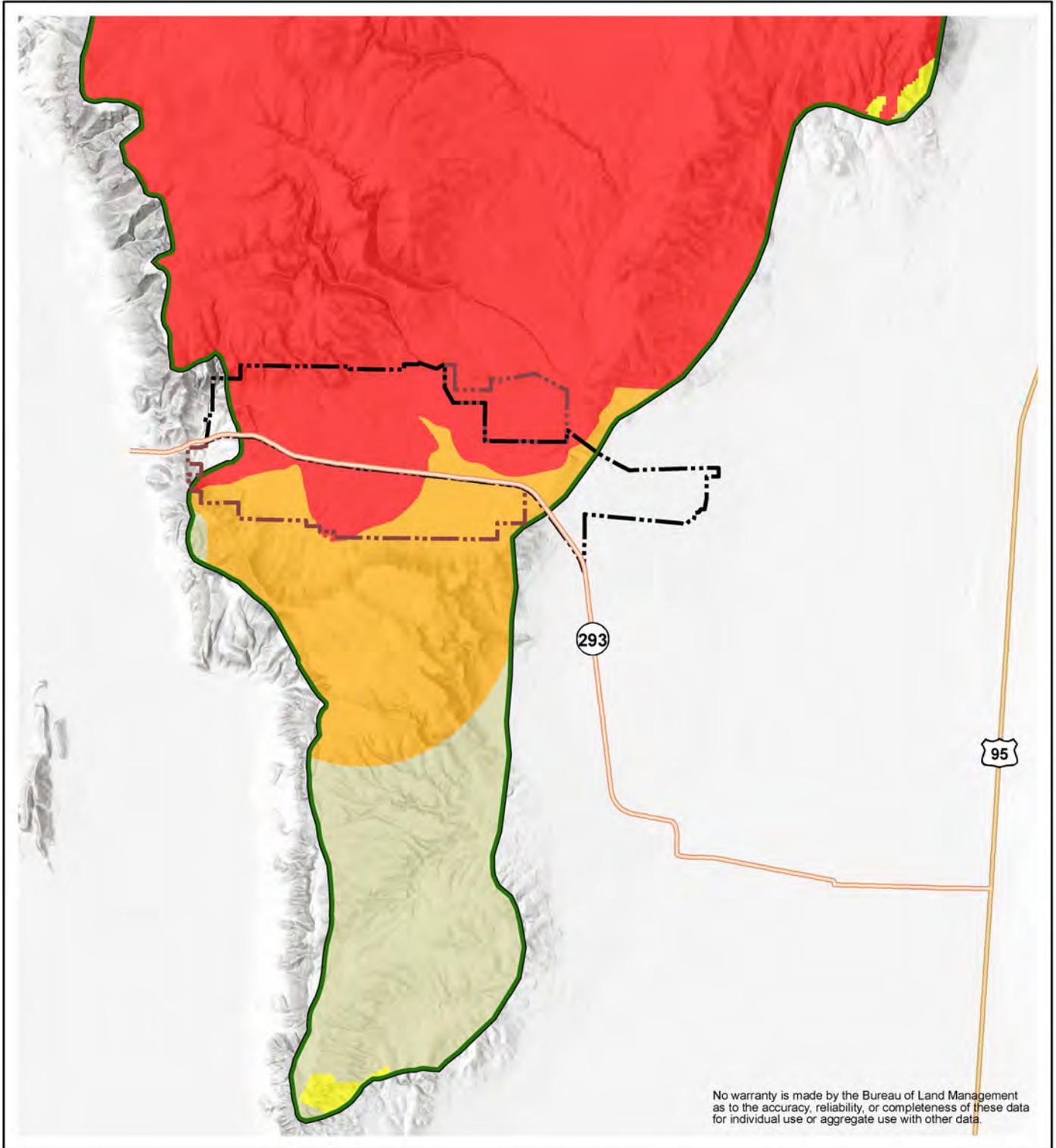
Source: NatGeo 2013; NDOW 2020.

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**Figure 4.5-10**  
Greater Sage-Grouse Lek sites within the 1-mile and 3.1 mile buffer of the PoO



- |  |   |
|--|---|
| PoO Boundary                                   | <b>Greater Sage-grouse Habitat Management</b> |
| Proposed Exploration PoO Boundary              | PHMA  |
| Greater Sage-grouse Population Management Unit | GHMA  |
|  | OHMA  |
|  | Non-Habitat                                   |

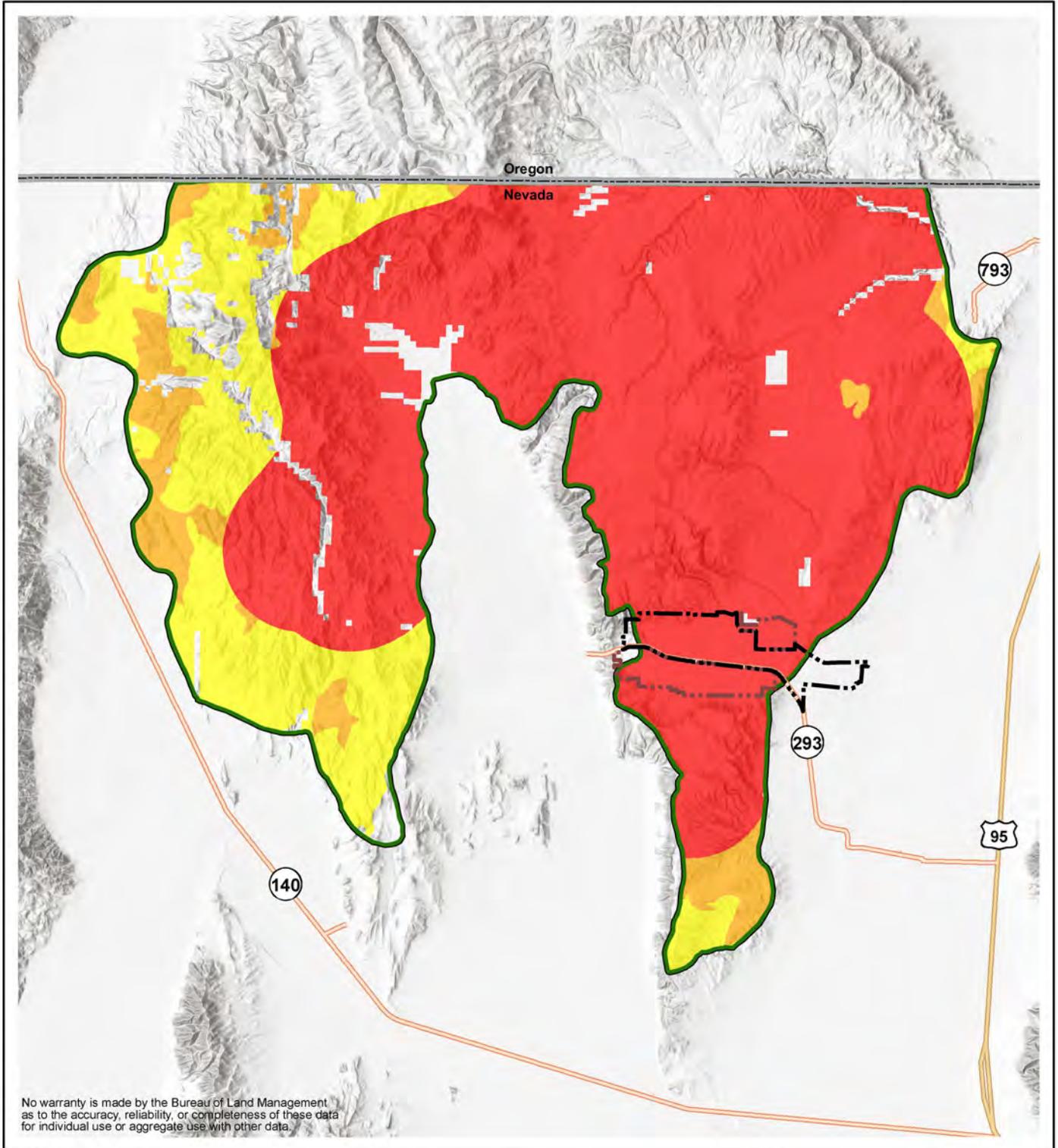


Source: BLM 2015.

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**Figure 4.5-11**  
**2015 GRSG Amendment Habitat Mapping**



- PoO Boundary
- Proposed Exploration PoO Boundary
- U.S. Highway
- State Highway
- Greater Sage-grouse Population Management Unit

- Greater Sage-grouse Habitat Management**
- PHMA
  - GHMA
  - OHMA
  - Non-Habitat



Source: BLM 2019.

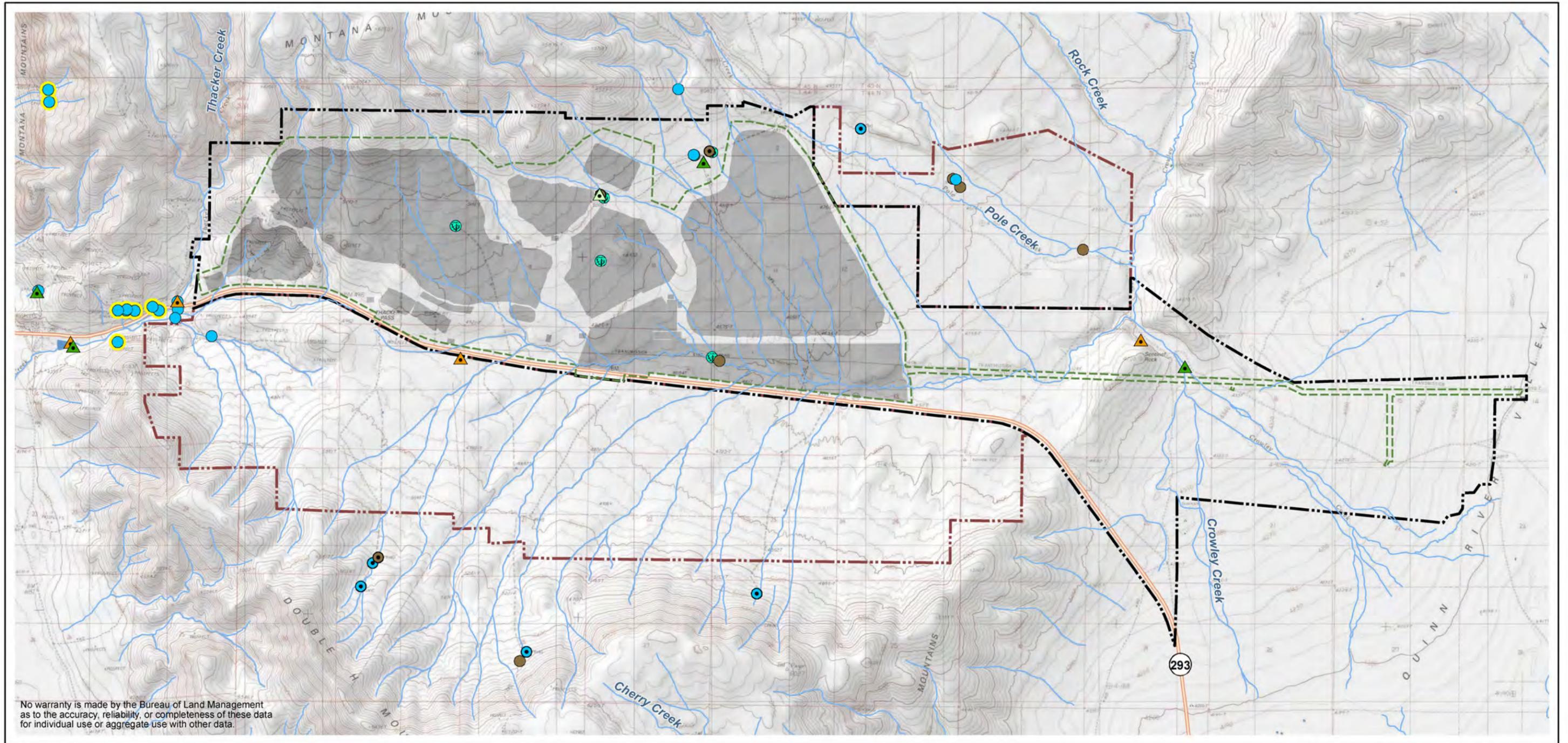


0 2.5 5 Miles

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**Figure 4.5-12**  
**2019 GRSG Amendment Habitat Mapping**



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- |                                   |                           |  |
|-----------------------------------|---------------------------|--|
| PoO Boundary                      | Wetland                   | <b>Seep/Spring - Status</b>              |
| Proposed Exploration PoO Boundary | Intermittent Stream/Creek | Wet - Developed                          |
| Disturbance Area Boundary         | <b>Anabat Detectors</b>   | Wet - Undeveloped                        |
| Mining Facilities                 | Spring 2018               | Dry - Developed                          |
| State Highway                     | Summer 2018               | Dry - Undeveloped                        |
|                                   | Fall 2018                 | Seep/Spring with Presence of Springsnail |



Source: LNC 2018, 2019; NatGeo 2013.

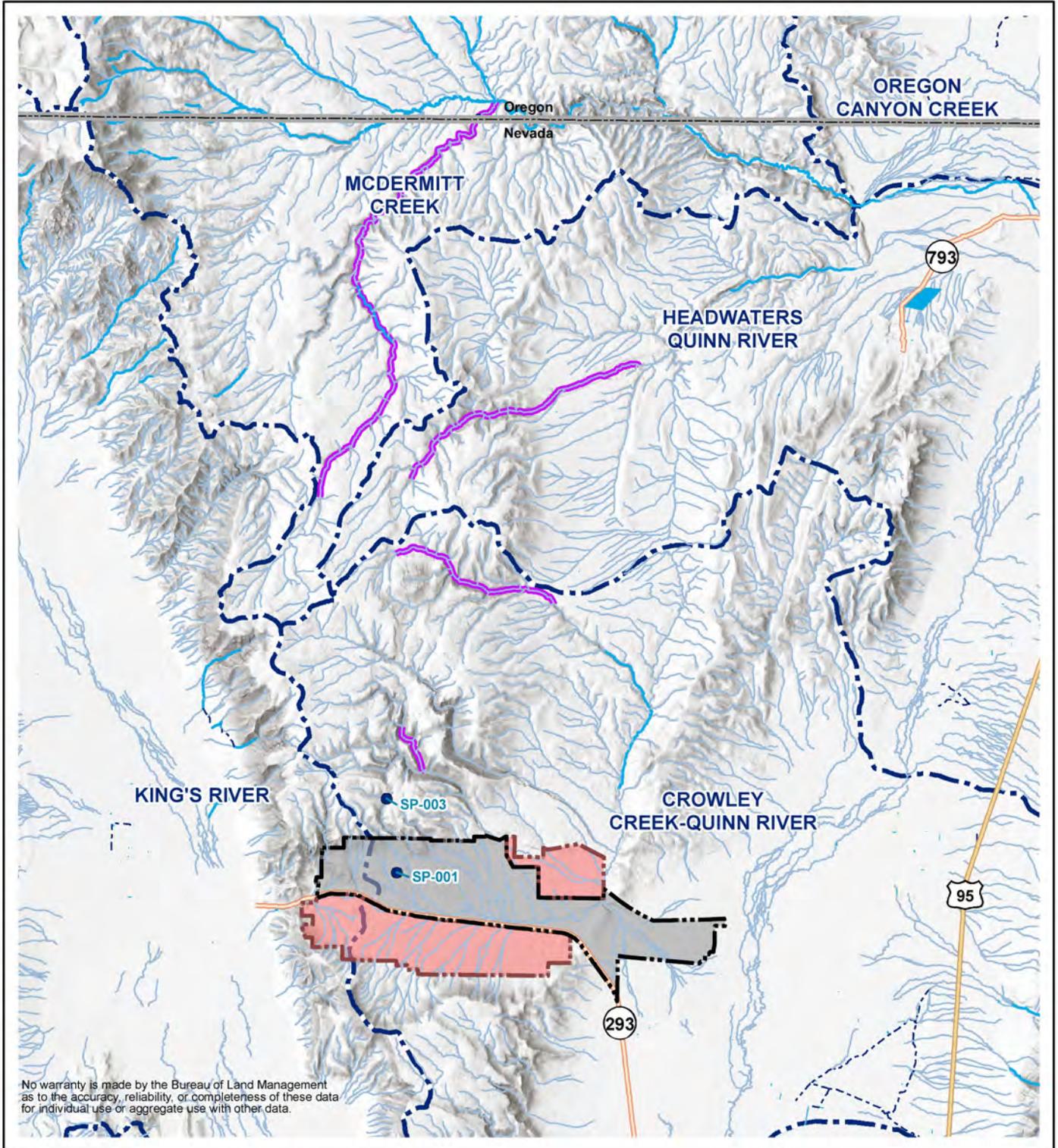


0 0.5 1 Miles

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**Figure 4.5-13**  
**Locations of Bat Detection Surveys and**  
**Mapped Wetland Habitat in the Project Area**



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-  PoO Boundary
-  Proposed Exploration
-  PoO Boundary
-  U.S. Highway
-  State Highway
-  Lahontan Cutthroat Trout Occupied Reach (2017)
-  Watershed Boundary (HUC-10)
-  Perennial Stream
-  Intermittent Stream
-  Canal or Ditch
-  Affected Spring



Source: NDOW 2018, NHD 2014.

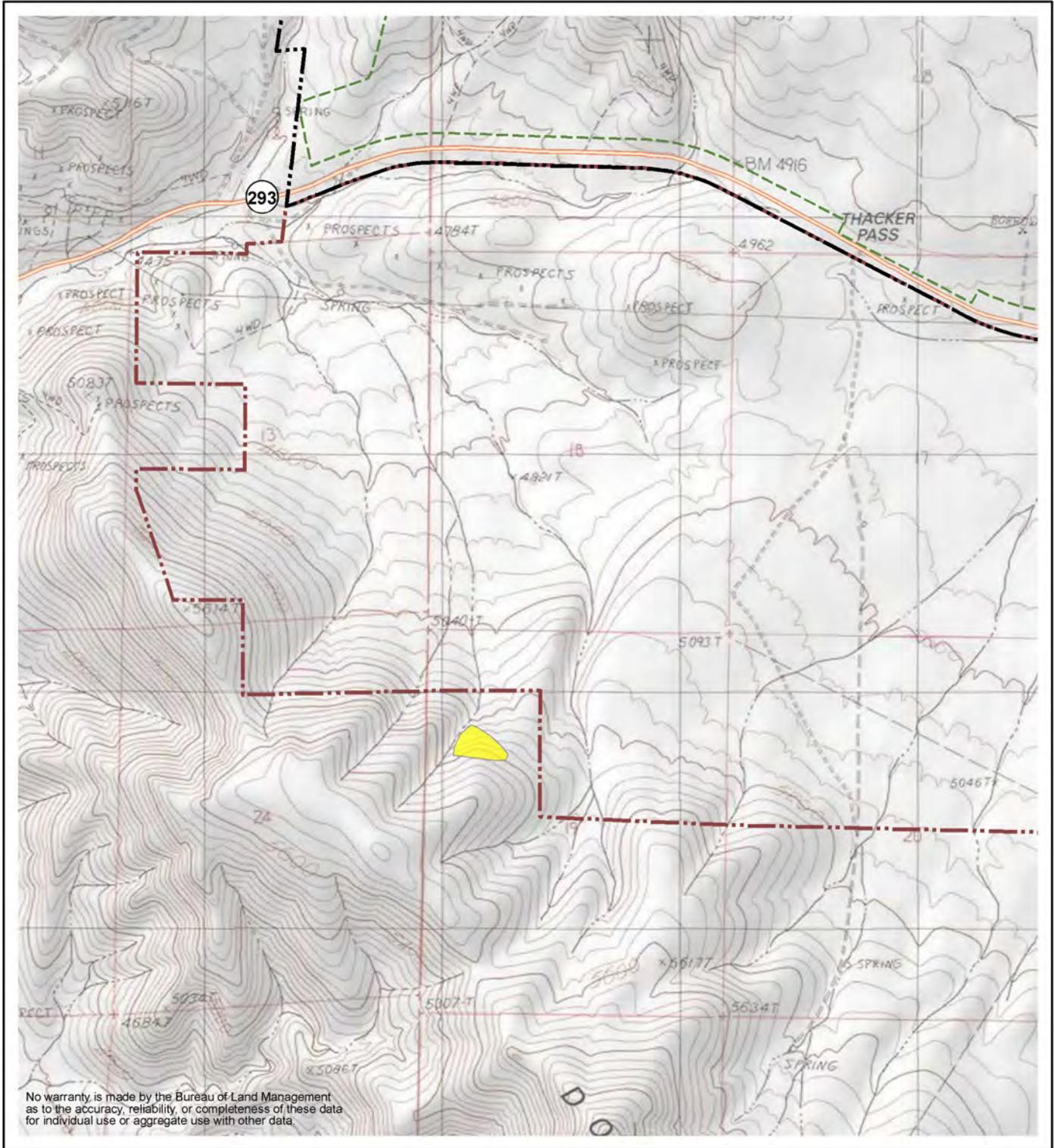




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**Figure 4.5-14**  
**Lahonton Cutthroat Trout-occupied**  
**Streams near the Project Area**



-  PoO Boundary
-  Proposed Exploration PoO Boundary
-  Disturbance Area Boundary
-  Crosby's buckwheat
-  State Highway

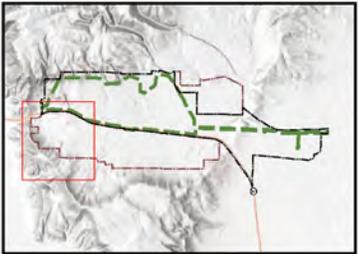
Source: LNC 2019, NatGeo 2013.



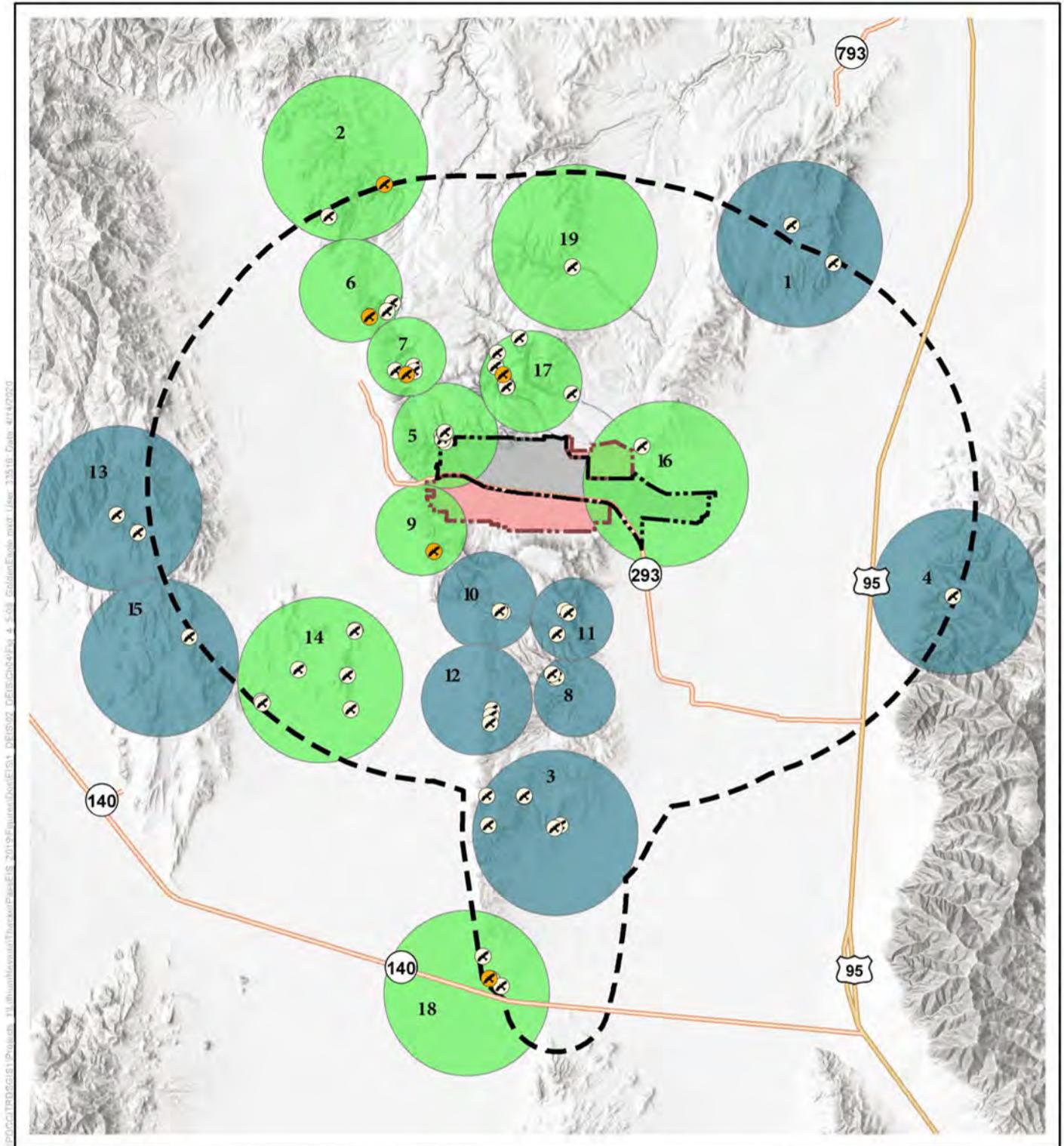

0 0.25 0.5 Miles

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**Figure 4.5-15**  
**Mapped Location of Crosby's Buckwheat**  
**from Vegetation Surveys**

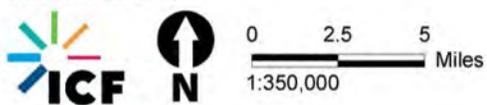


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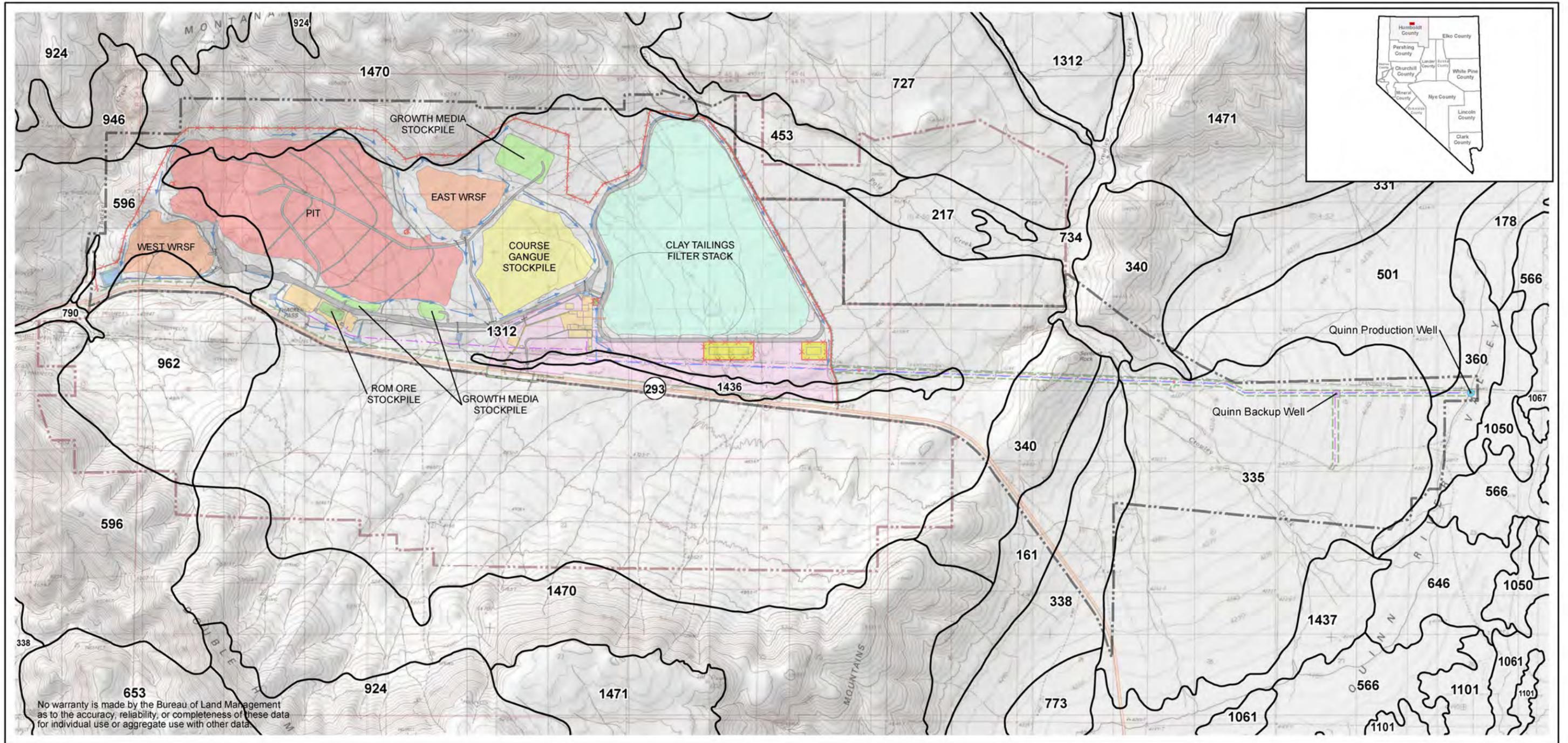
- PoO Boundary
- Proposed Exploration PoO Boundary
- Raptor Survey Area
- Golden Eagle Nest Status (2019)**
- Occupied
- Unoccupied
- Estimated Golden Eagle Territory Status (2019)**
- Occupied
- Unclassified



Source: LNC 2019.



**Figure 4.5-16**  
**Golden Eagle Survey Area, Territories and Nests**



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**Legend**

- |                                   |                              |                            |                                 |
|-----------------------------------|------------------------------|----------------------------|---------------------------------|
| Soil Map Unit                     | Roads                        | Clay Tailings Filter Stack | Run of Mine (ROM) Ore Stockpile |
| PoO Boundary                      | State Highway                | Course Gangue Stockpile    | Waste Rock Storage Facility     |
| Proposed Exploration PoO Boundary | Existing Powerline           | Growth Media Stockpile     | Emergency Pond                  |
| Disturbance Area Boundary         | Fence                        | Mine Facilities            | Reclaim Pond                    |
| Conveyor Corridor                 | Power Line                   | Pit                        | Sediment Pond                   |
| Existing Water Well               | Water Line                   |                            | Future Plant Expansion Area     |
| Proposed Water Well               | Fiber Optic Line             |                            |                                 |
|                                   | Stormwater Diversion Channel |                            |                                 |
|                                   | Culvert                      |                            |                                 |

Symbol	Map Unit Name
161	Bliss-Chiara association
217	Flue loam, 0 to 2 percent slopes 1/
331	McConnel gravely fine sandy loam, 2 to 8 percent slopes
335	McConnel very gravely fine sandy loam, 0 to 2 percent slopes 1/
338	McConnel-Pumper-Whirfo complex, 2 to 8 percent slopes
340	Boger-Soughe association
360	Needle Peak silt loam 1/
452	Kingsriver loam, 0 to 2 percent slopes 1/

Symbol	Map Unit Name
501	Enko loamy very fine sand, 0 to 2 percent slopes 1/
596	Trunk-Burrita associaiton
727	Dewar-Midraw association
734	Kelk silt loam, occasionally flooded, 0 to 2 percent slopes 1/
790	Rio King loam 1/
946	Soughe-Rubble land complex, 30 to 75 percent slopes
962	Zevadez-Vanwyper association
1312	Dewar-Dacker association
1436	Rodock loam, 0 to 2 percent slopes 1/
1470	Zymans-Burrita-Devada association

Source: NatGeo 2013; NRCS 2019.

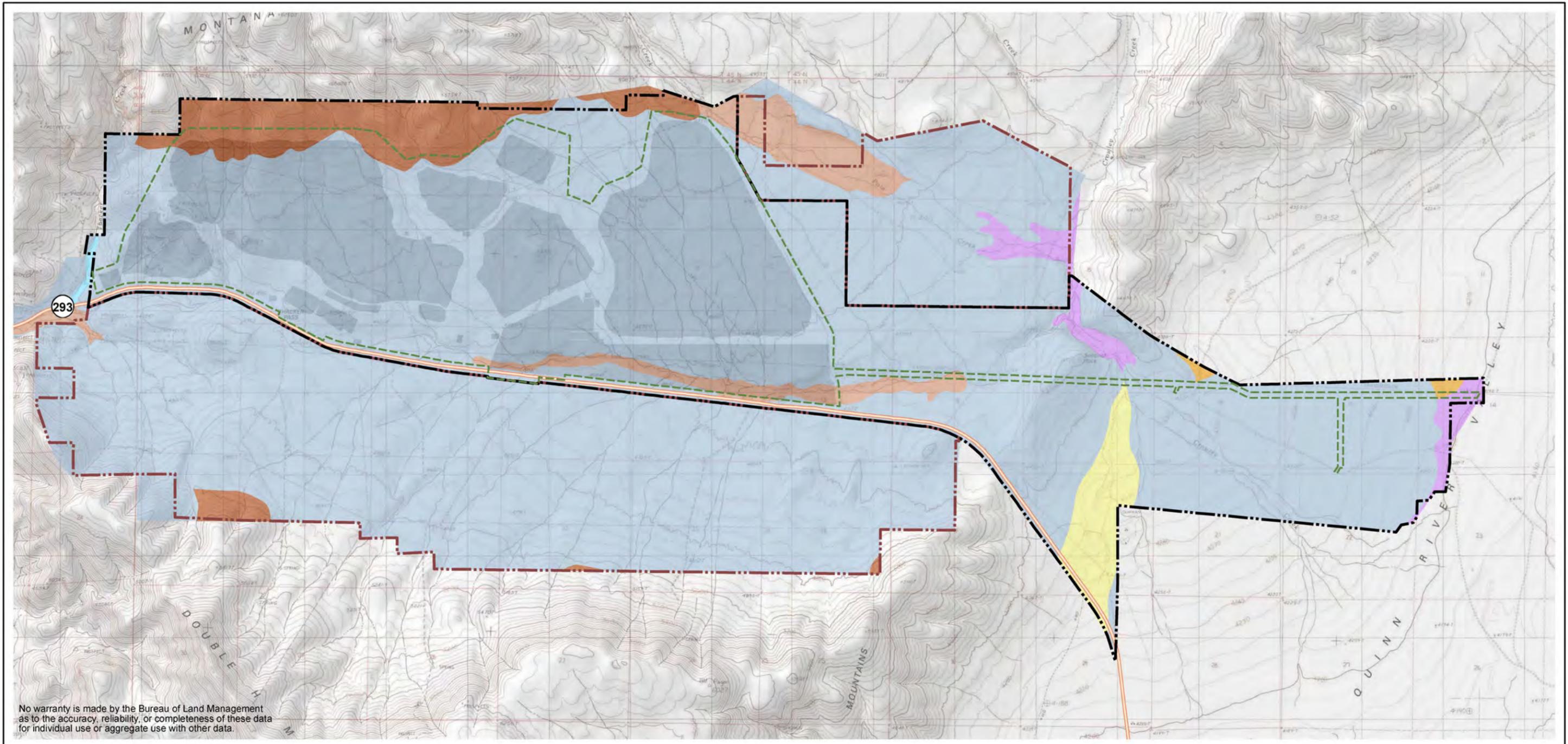


0 0.5 1 Miles

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**Figure 4.7-1**  
**Proposed Action Mine Facilities and Soil Map Units**



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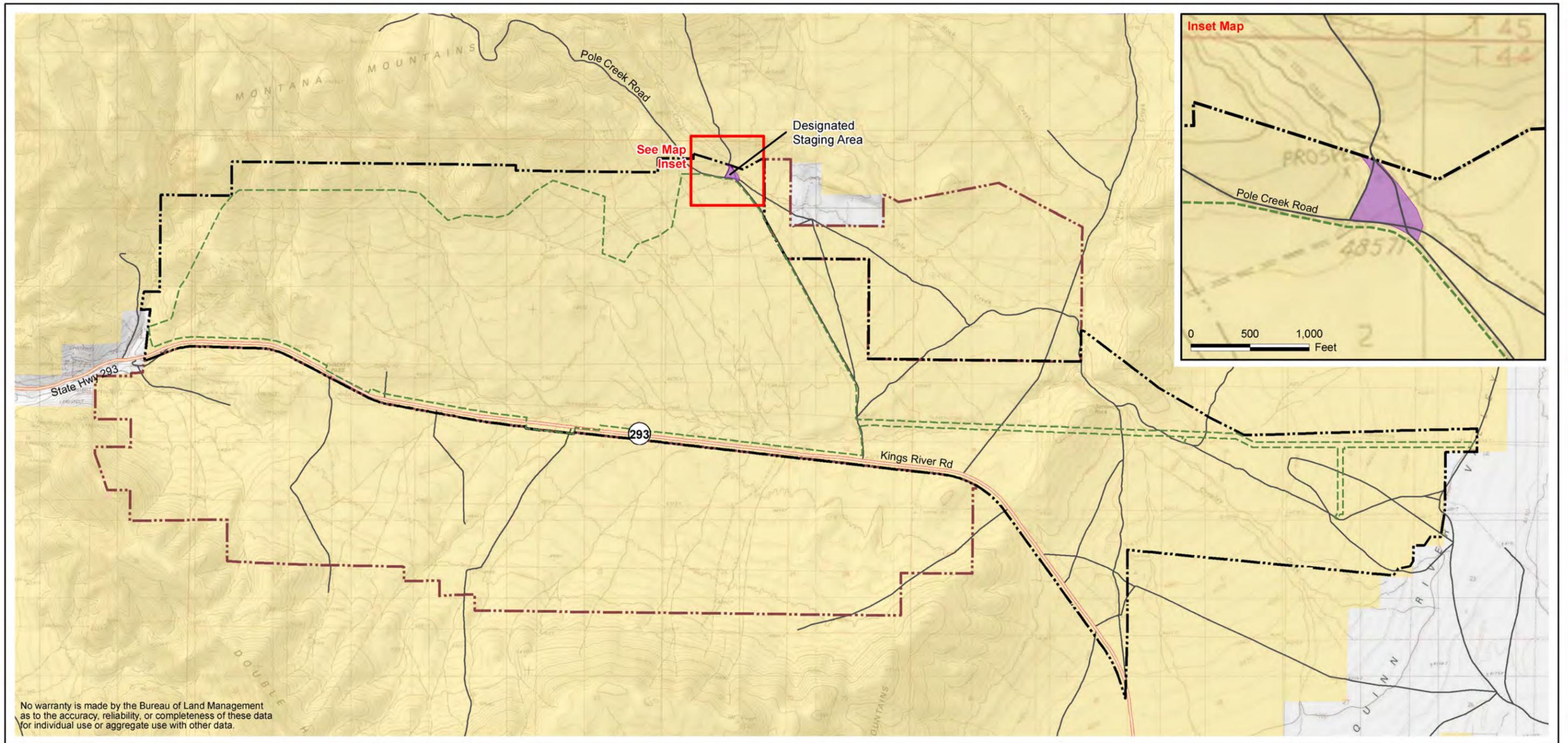
- |                                   |                                    |
|-----------------------------------|------------------------------------|
| PoO Boundary                      | <b>Disturbance Response Groups</b> |
| Proposed Exploration PoO Boundary | 025XY001NV: Moist Floodplain       |
| Disturbance Area Boundary         | 025XY003NV: Loamy Bottom 8-14"     |
| Mining Facilities                 | 23 9: ARTRW8/ACTH7                 |
| State Highway                     | 24 1: ARTRW/ACTH7                  |
|                                   | 24 2: ATCO-ARSP5/ELEL5-ACHY        |
|                                   | 24 7: ARTR2/HECO26-ACHY            |
|                                   | 24 9: ARTRT/LECI4                  |



Source: NatGeo 2013, SWCA 2018.

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**Figure 4.7-2**  
**Existing Habitat in the Project Area**  
**(Disturbance Response Groups in the Project Area)**



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- Designated Livestock and Recreation Staging Area
- State Highway
- Local Road

- Surface Management Agency**
- Bureau of Land Management
  - Private

Source: BLM 2017, 2020.



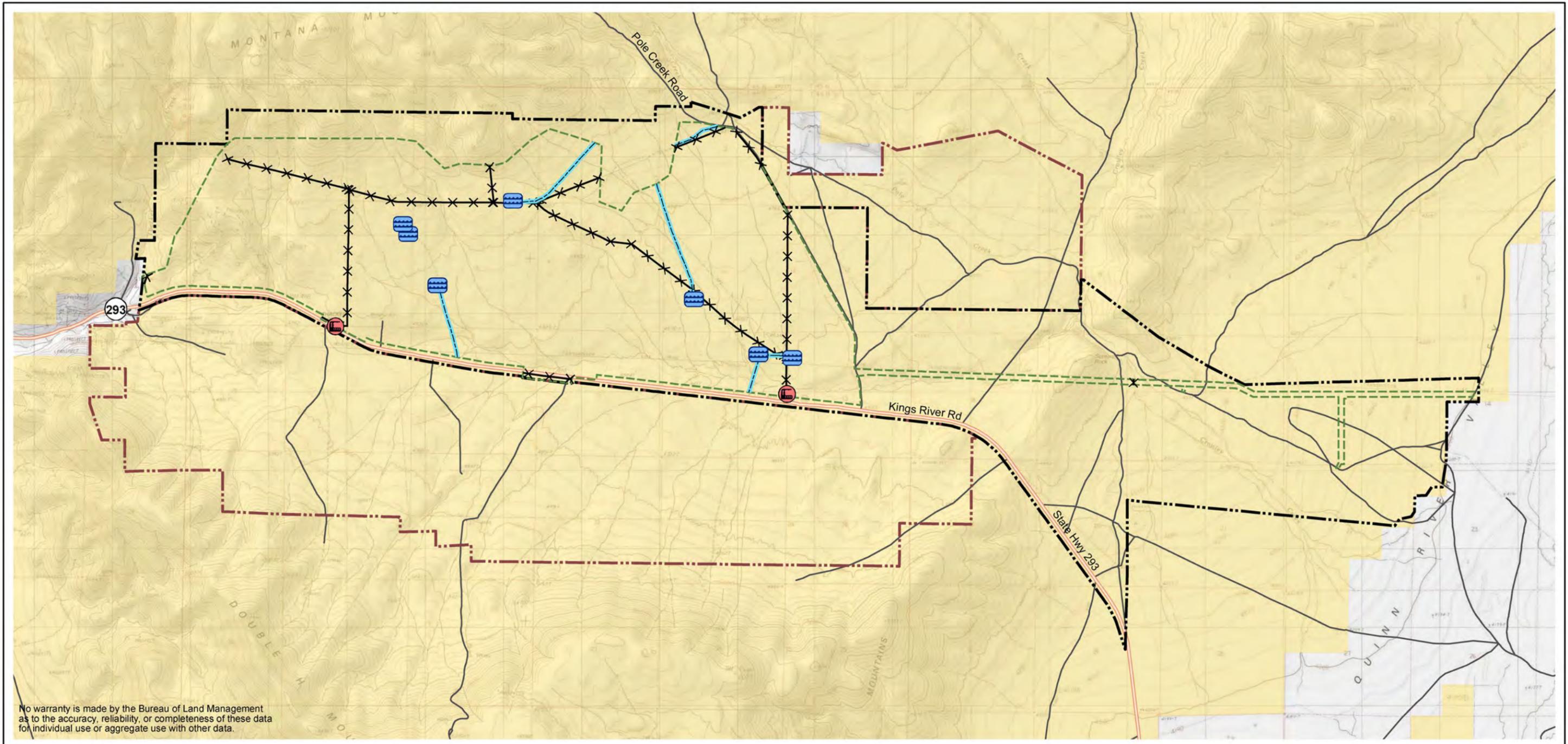
0 0.5 1 Miles

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**Figure 4.8-1**  
**Designated Livestock and Recreation Staging Area**



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- PoO Boundary
- Proposed Exploration PoO Boundary
- Disturbance Area Boundary
- State Highway
- Local Road
- Surface Management Agency**
- Bureau of Land Management
- Private
- Range Improvements**
- Maintenance Facility
- Water Development/Control
- Fence and/or Enclosure
- Water Development/Control

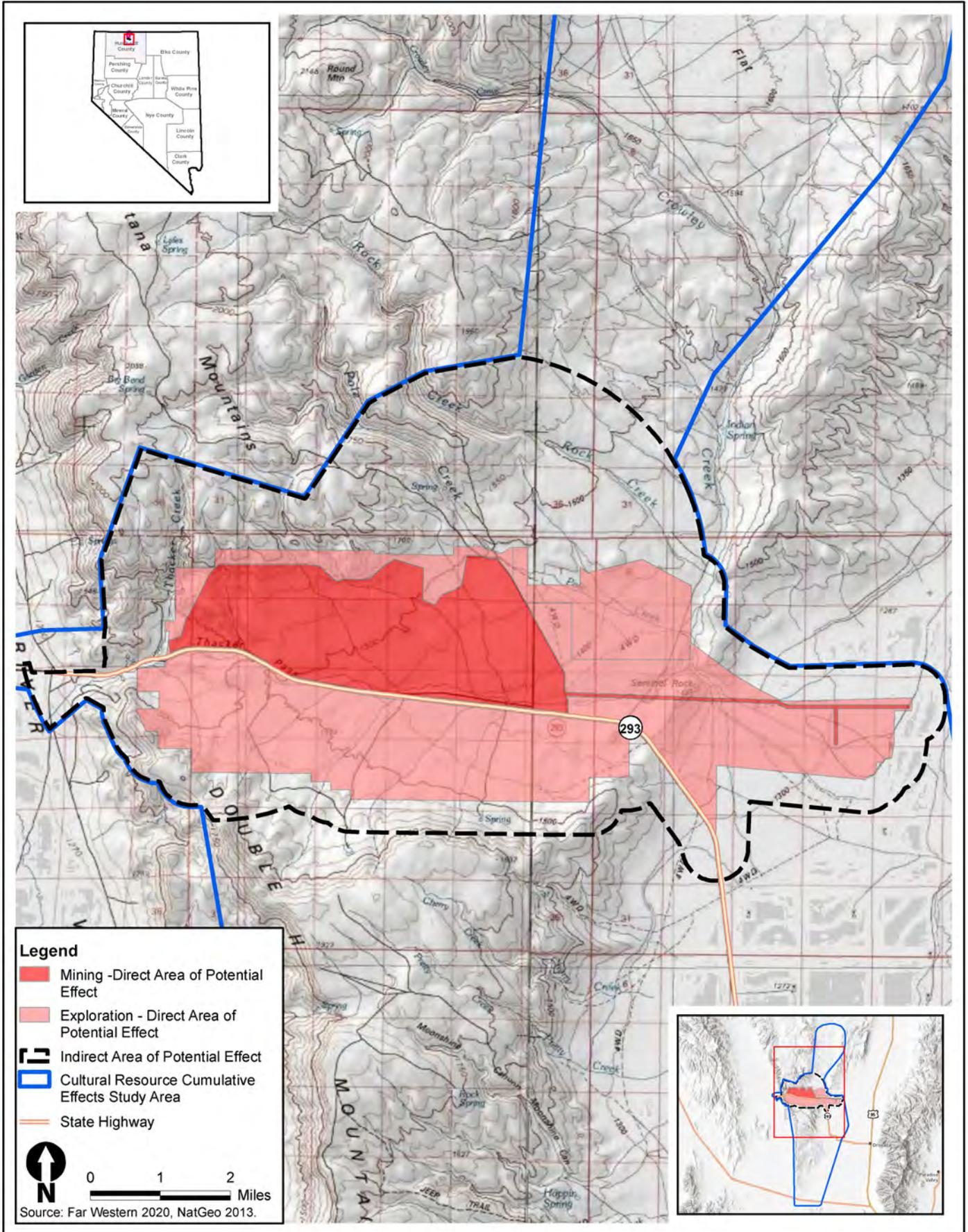
Source: BLM 2017, 2020.

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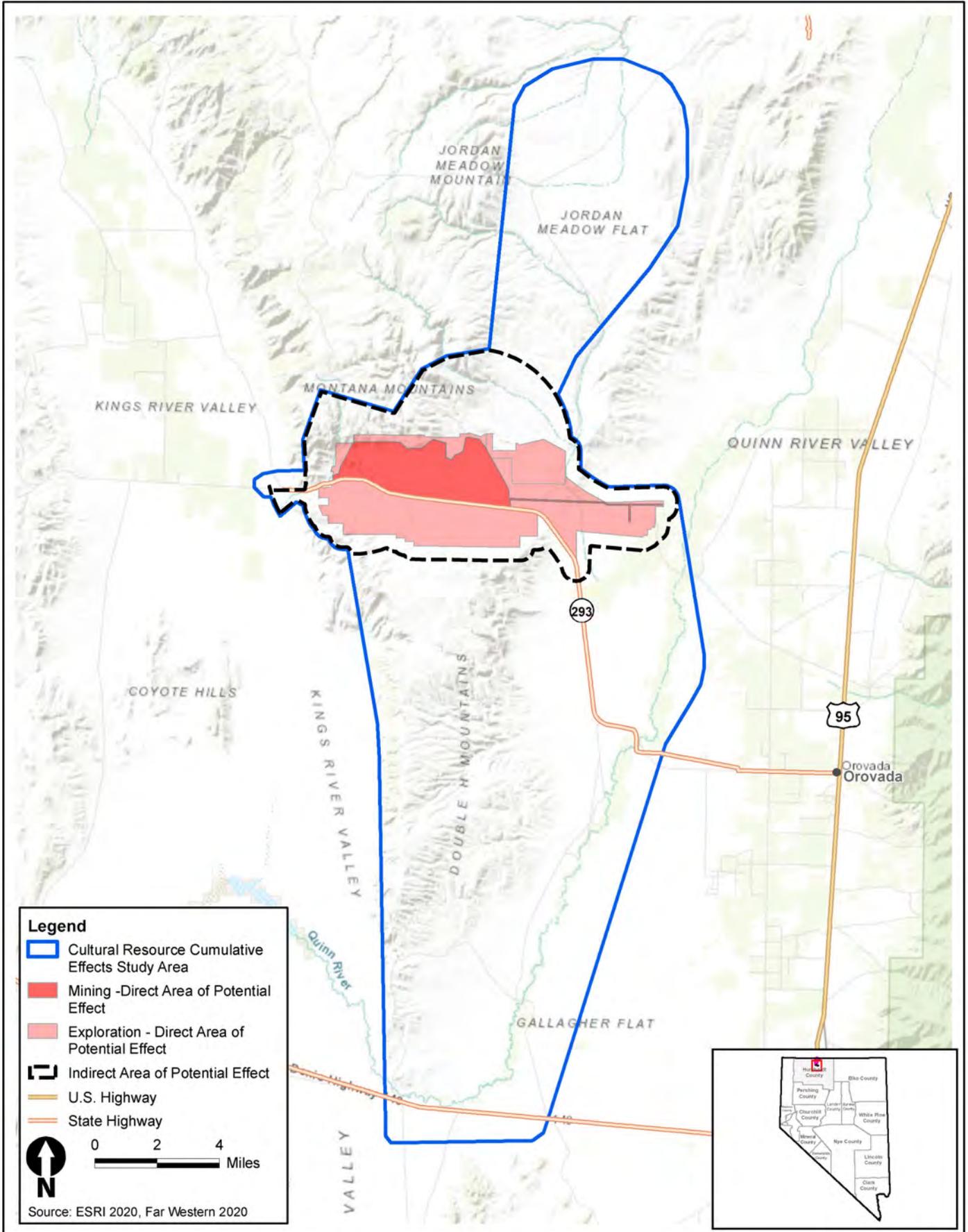
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**Figure 4.8-2**  
**Range Improvements**



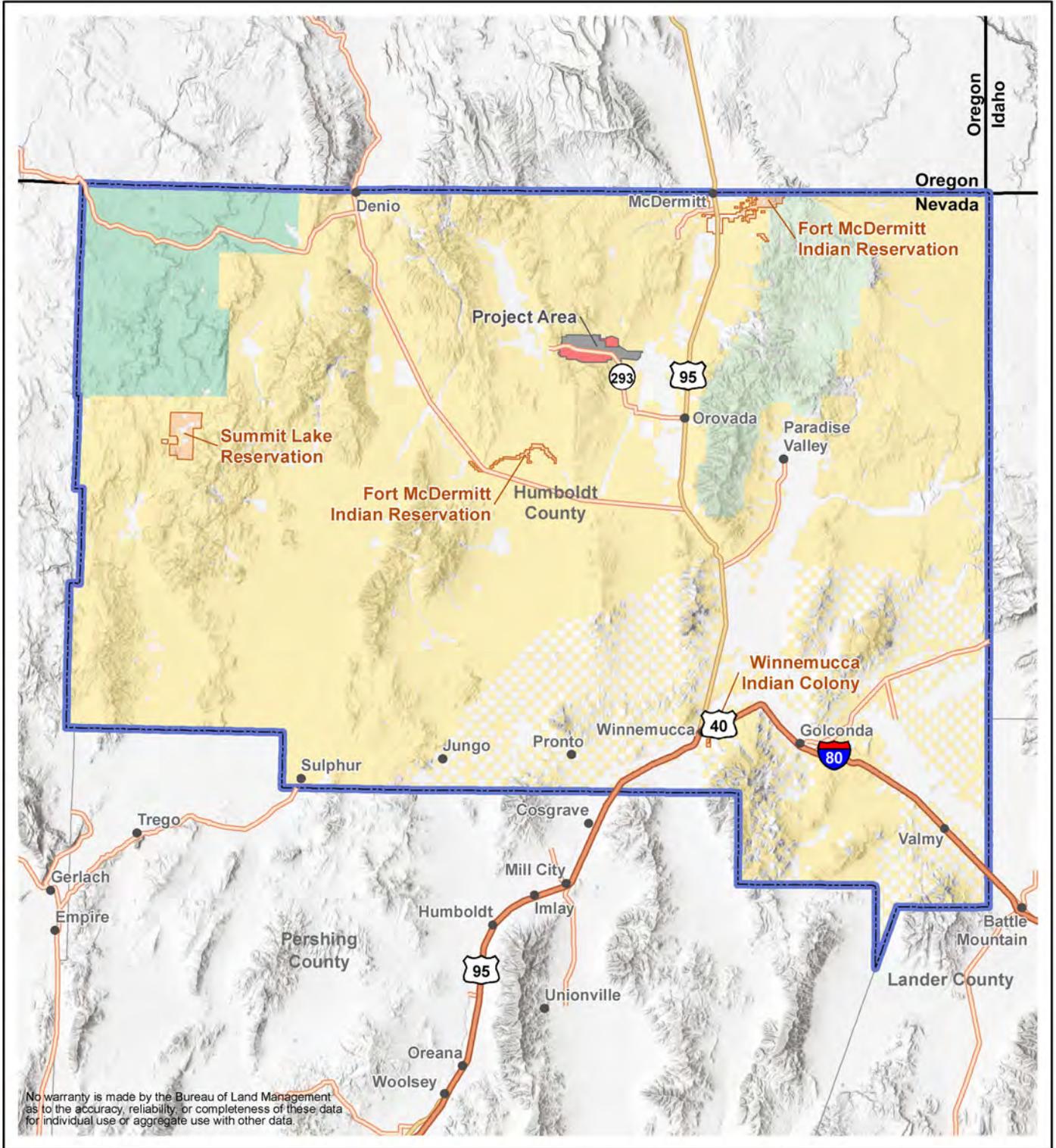
**Figure 4.11-1**  
**Mining, Exploration, and Indirect**  
**Areas of Potential Effect**



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**Figure 4.11-2**  
**Cultural Resources Cumulative Effects Study Area**



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- |                          |                                  |               |
|--------------------------|----------------------------------|---------------|
| Proposed Mine            | <b>Surface Management Agency</b> | City or Town  |
| Proposed Exploration     | Bureau of Land Management        | Interstate    |
| Socioeconomic Study Area | Tribal Land                      | U.S. Highway  |
| Native Community         | U.S. Forest Service              | State Highway |
|                          | U.S. Fish and Wildlife Service   |               |
|                          | Private                          |               |

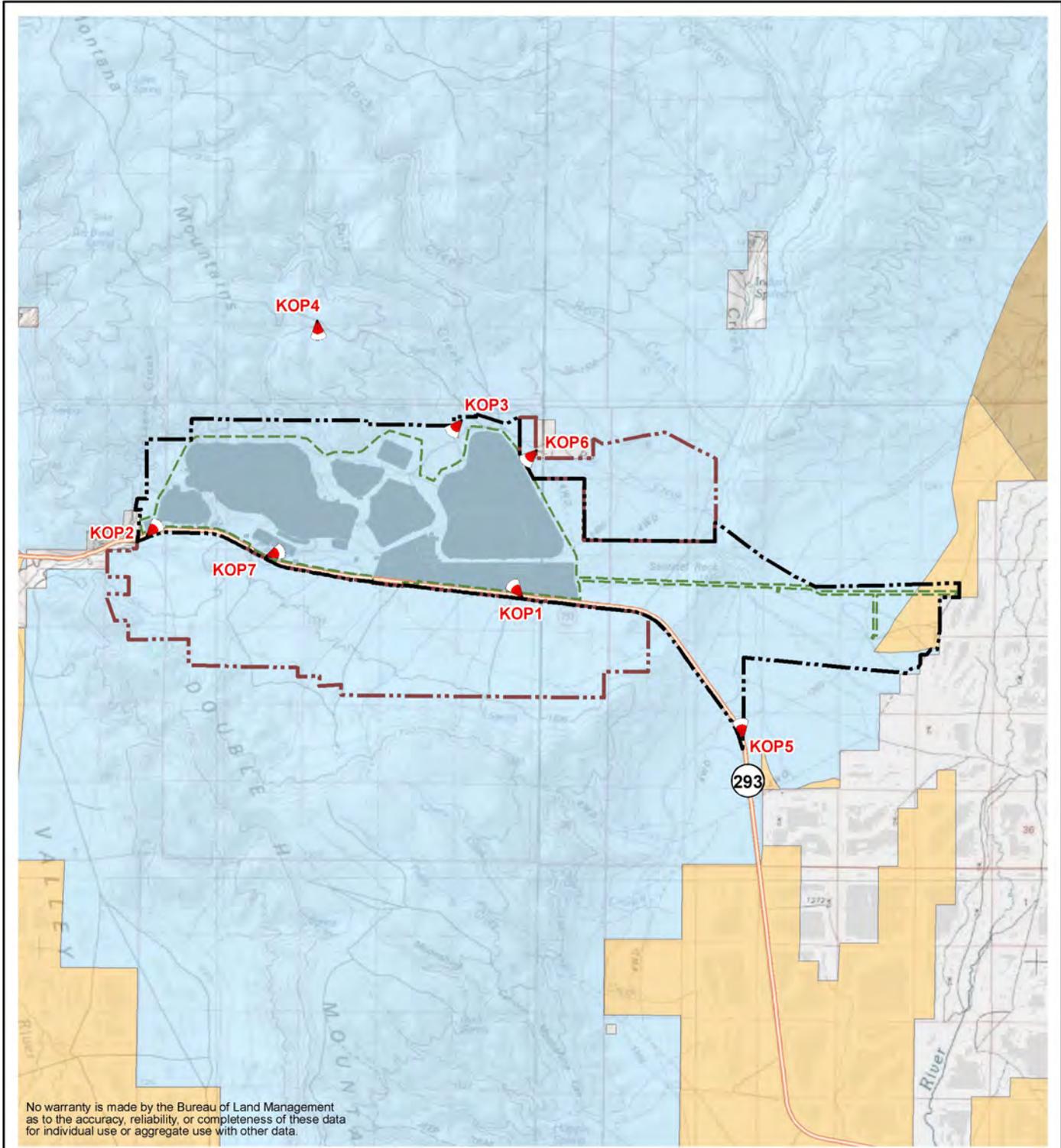


Source: BLM 2017, U.S. Census Bureau 2017.

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**Figure 4.12-1**  
**Socioeconomic Study Area**



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- PoO Boundary
  - Proposed Exploration PoO Boundary
  - Disturbance Area Boundary
  - Mining Facilities
  - State Highway
  - Key Observation Point (KOP)
- Visual Resource Management**
- Class I
  - Class II
  - Class III
  - Class IV



Source: BLM 2015, LNC 2020.



0 0.5 1  
Miles

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**Figure 4.15-1  
Visual Resource Management Classifications**