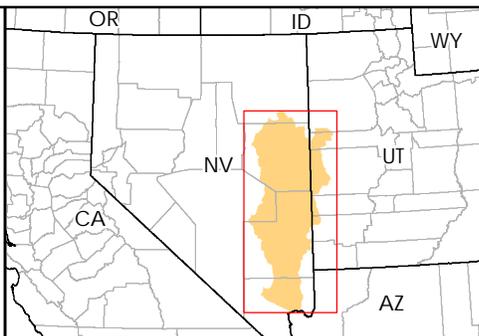
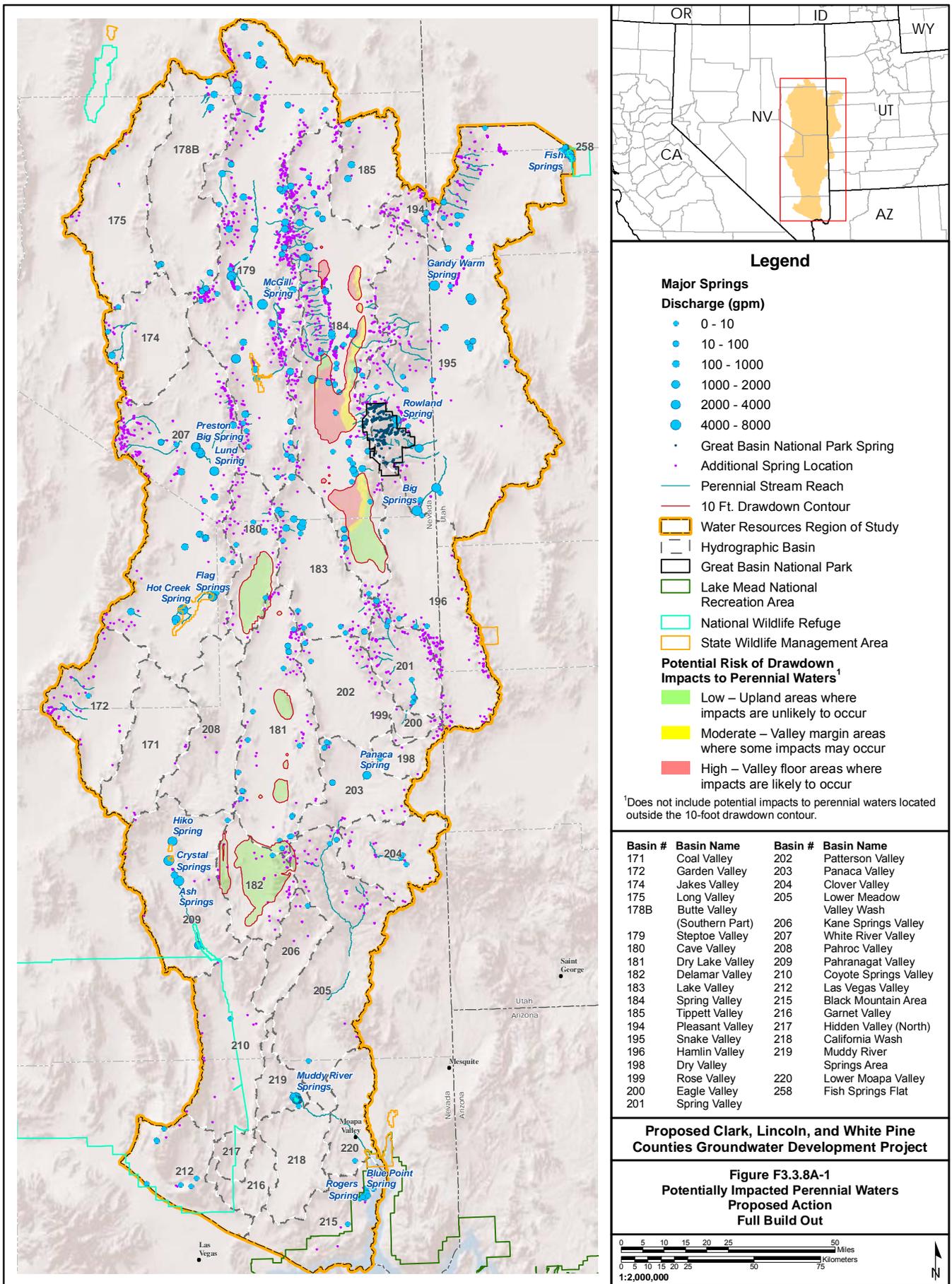


### **F3.3.8**

#### **Areas of Potential Risk within Predicted Drawdown Areas**



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

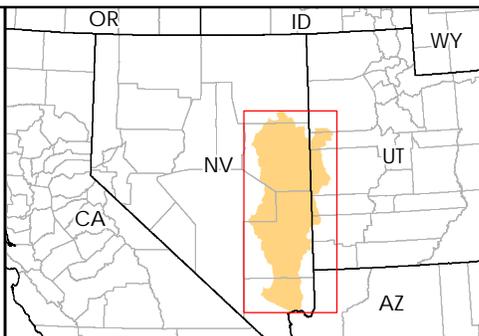
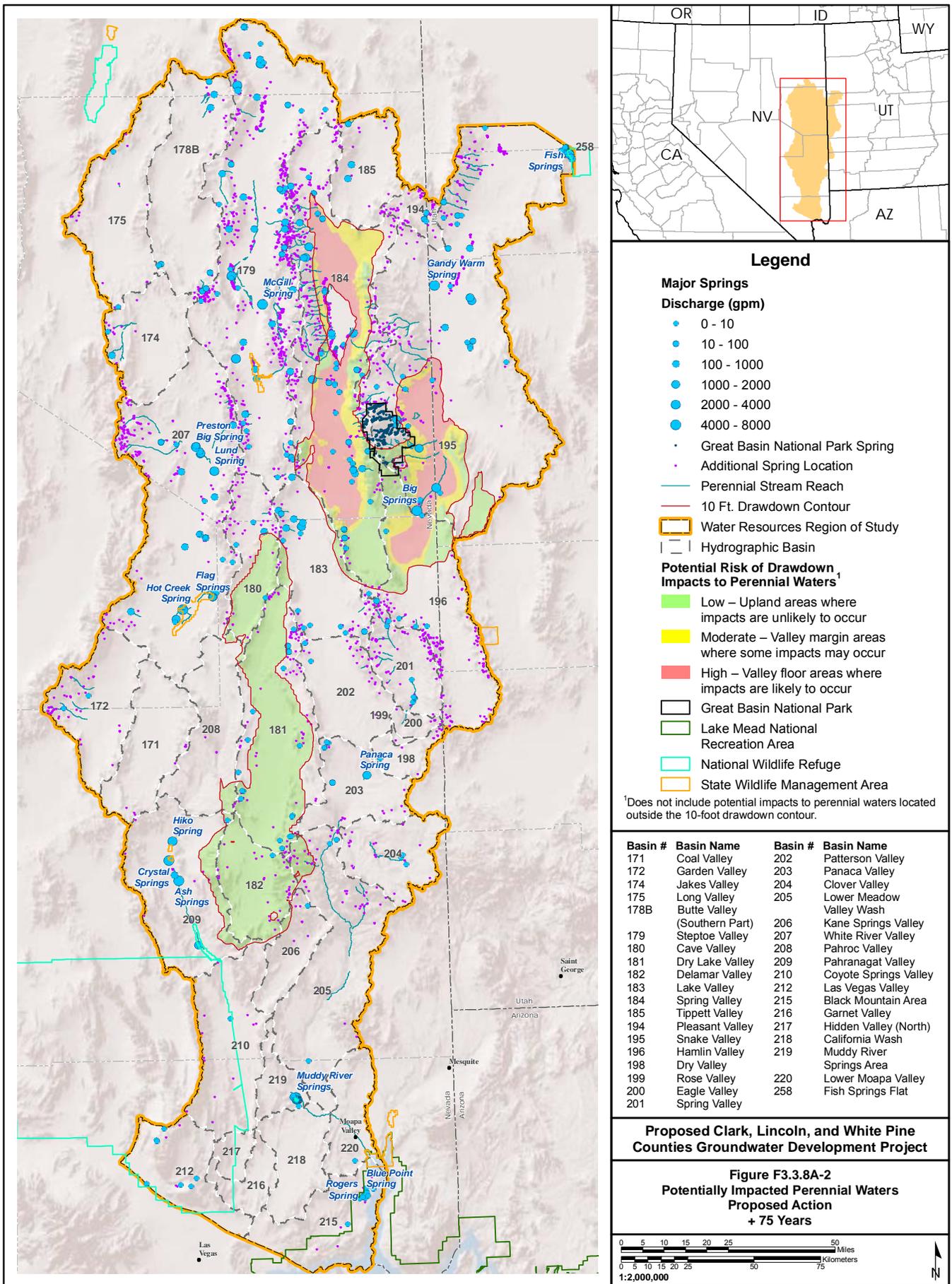
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-1**  
**Potentially Impacted Perennial Waters**  
**Proposed Action**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
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- High – Valley floor areas where impacts are likely to occur

- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahrangat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

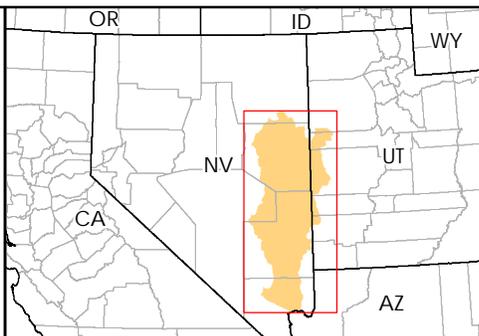
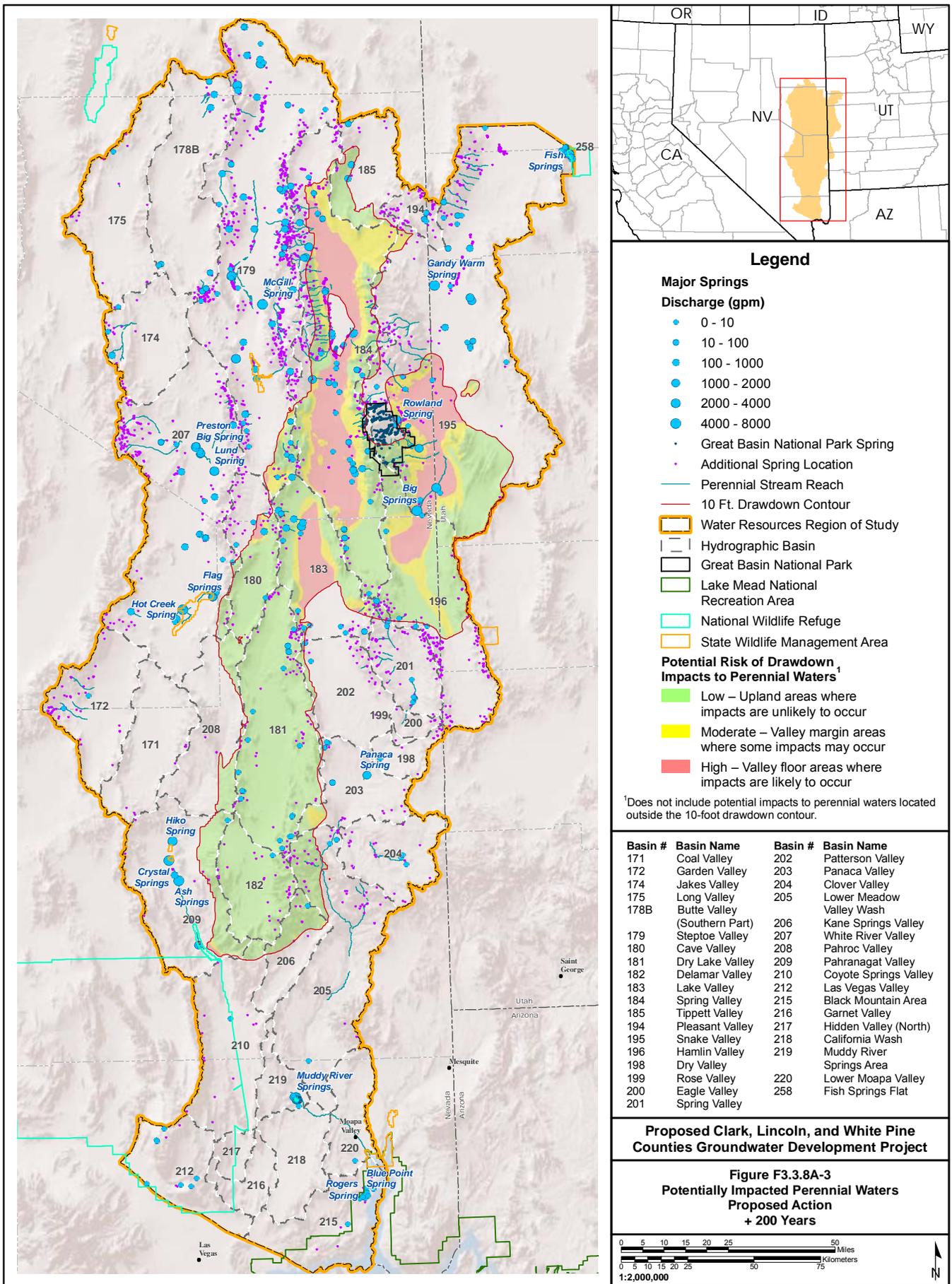
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-2**  
**Potentially Impacted Perennial Waters**  
**Proposed Action + 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location
- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

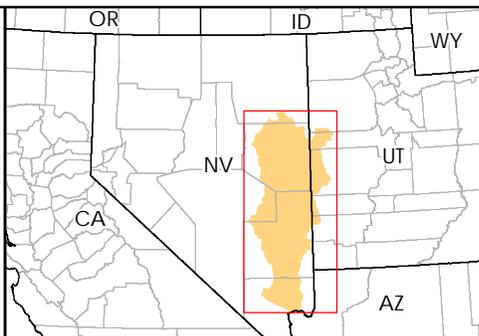
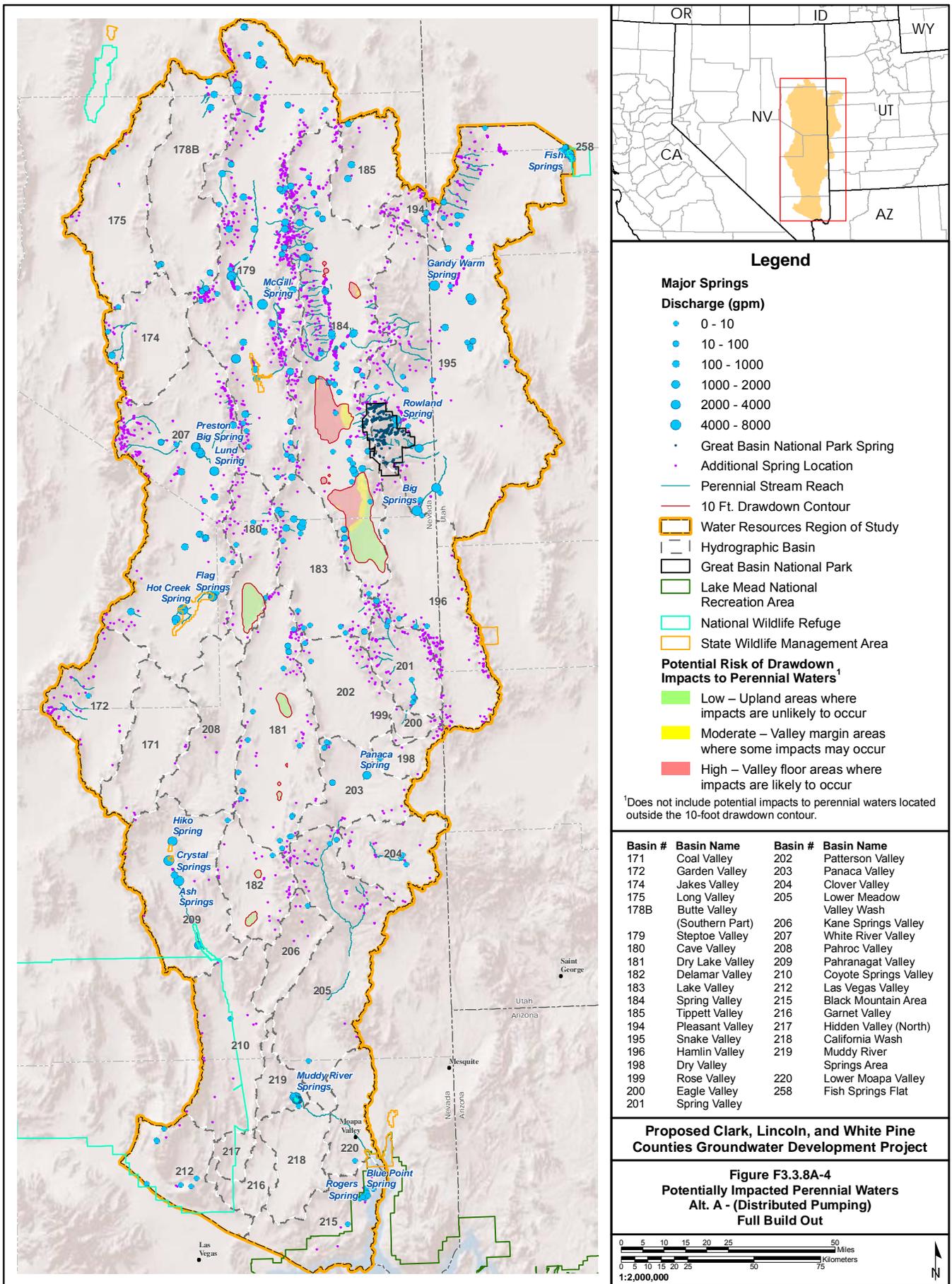
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-3**  
**Potentially Impacted Perennial Waters**  
**Proposed Action + 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

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- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

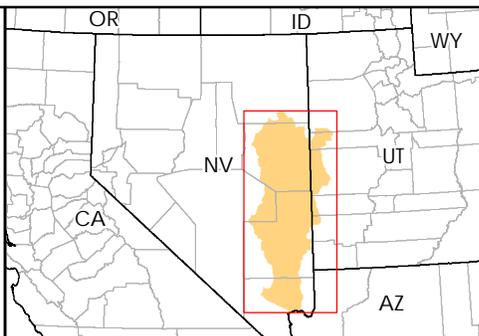
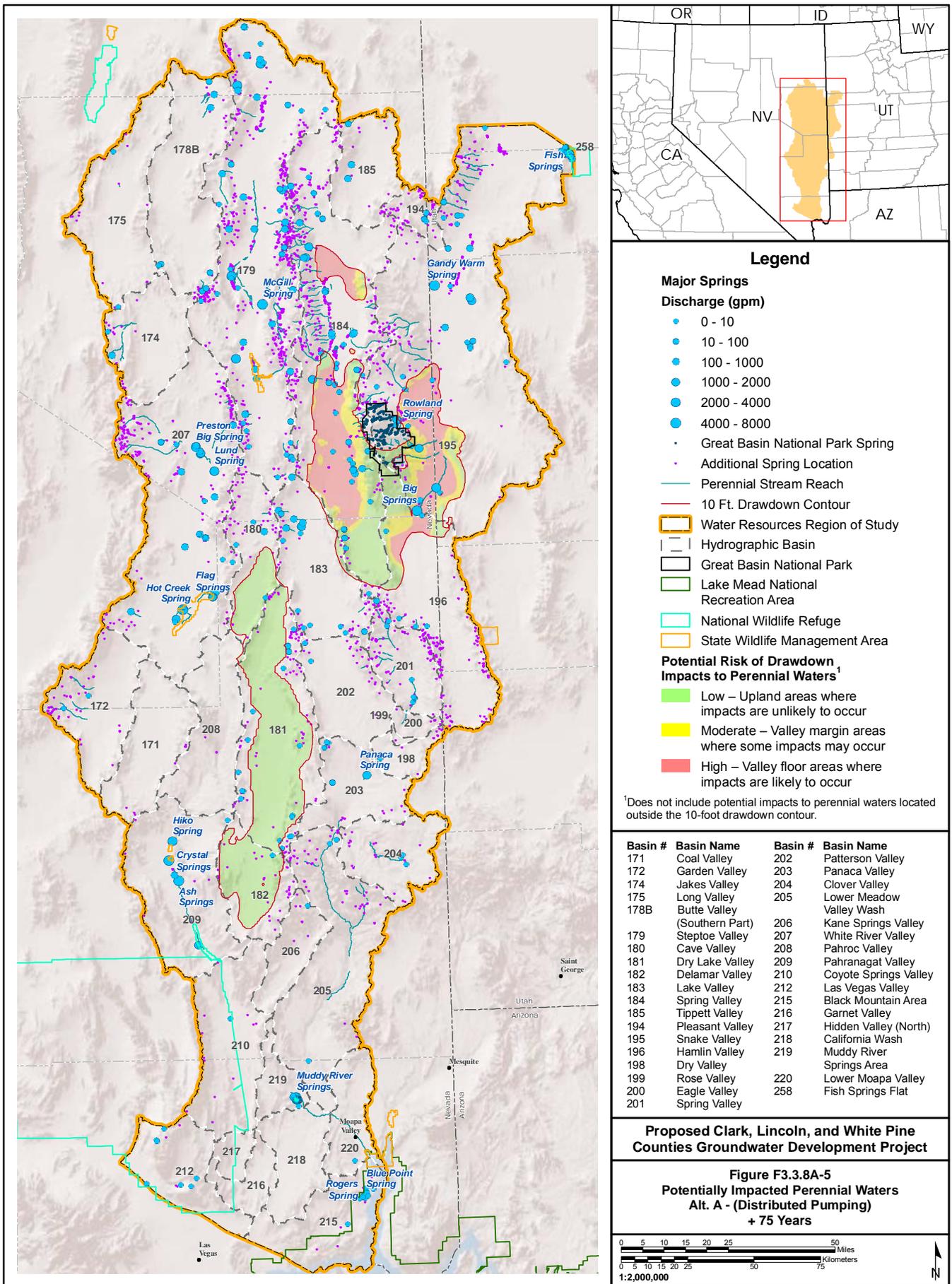
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-4**  
**Potentially Impacted Perennial Waters**  
**Alt. A - (Distributed Pumping)**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
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174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
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198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

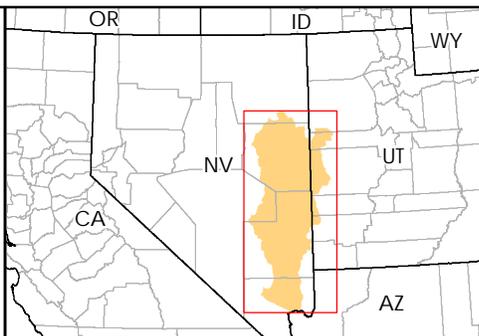
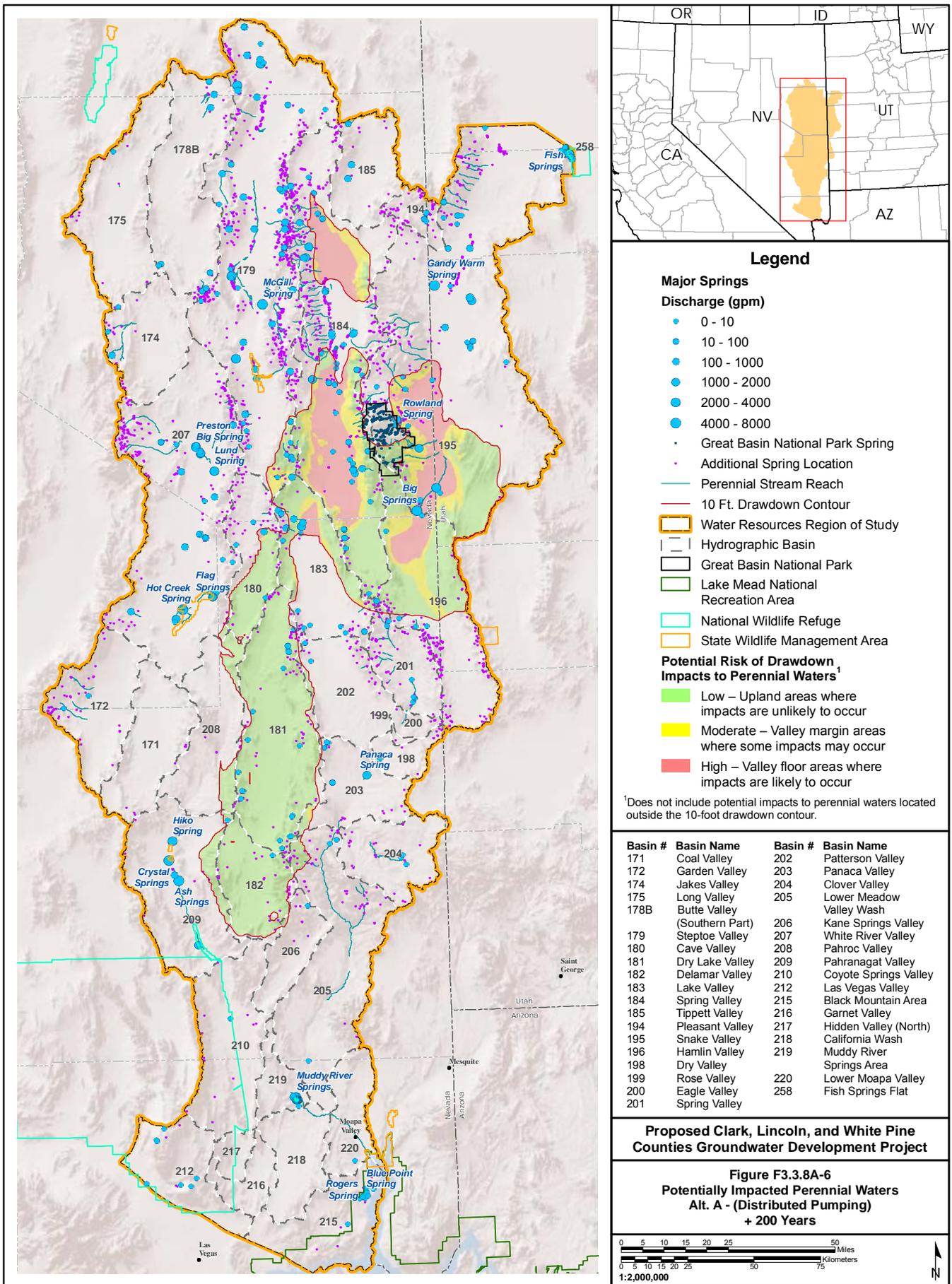
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-5**  
**Potentially Impacted Perennial Waters**  
**Alt. A - (Distributed Pumping)**  
**+ 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

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180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahrnagat Valley
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195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

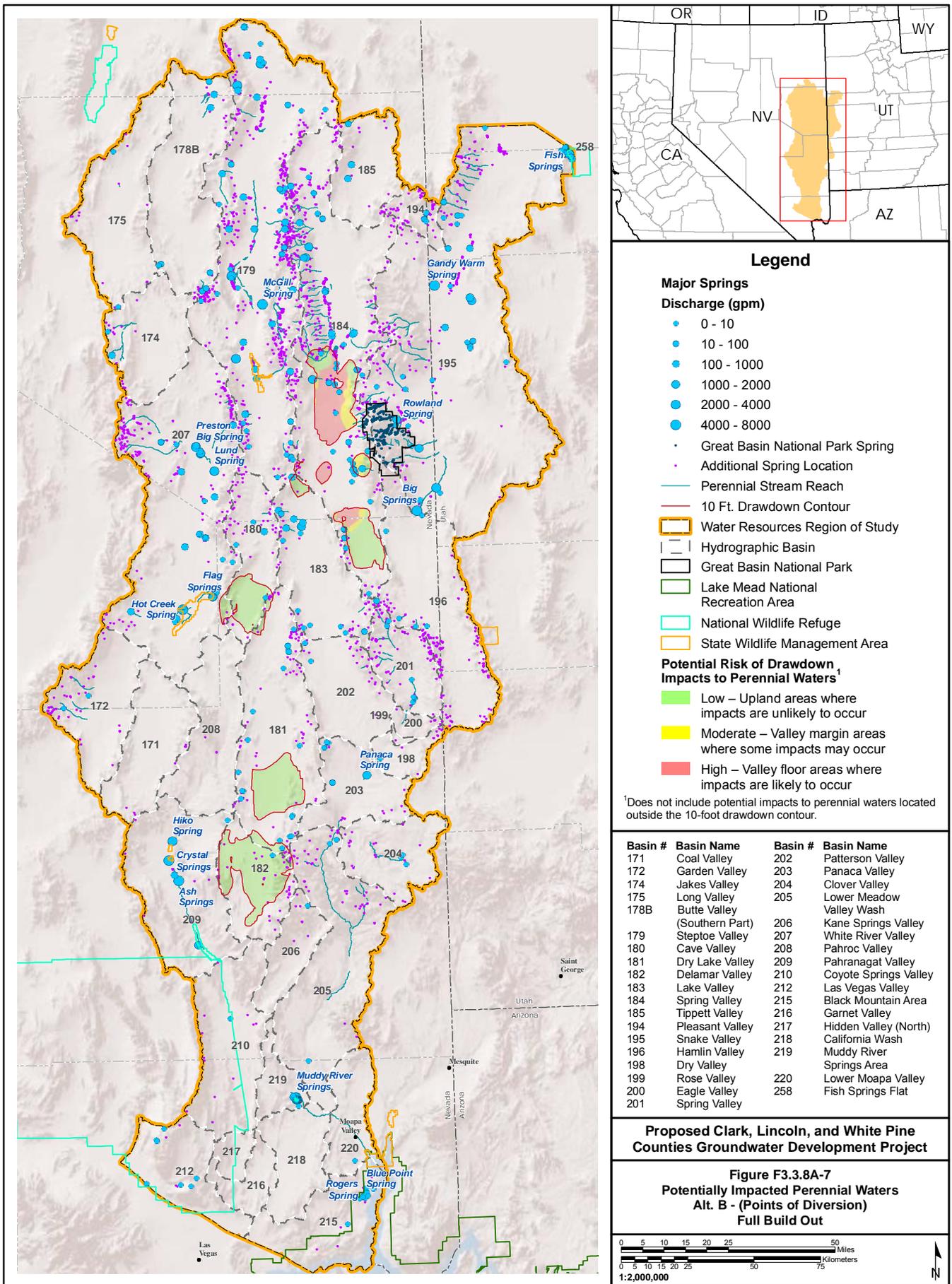
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-6**  
**Potentially Impacted Perennial Waters**  
**Alt. A - (Distributed Pumping)**  
**+ 200 Years**

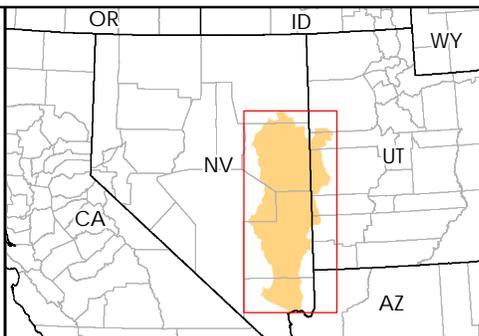
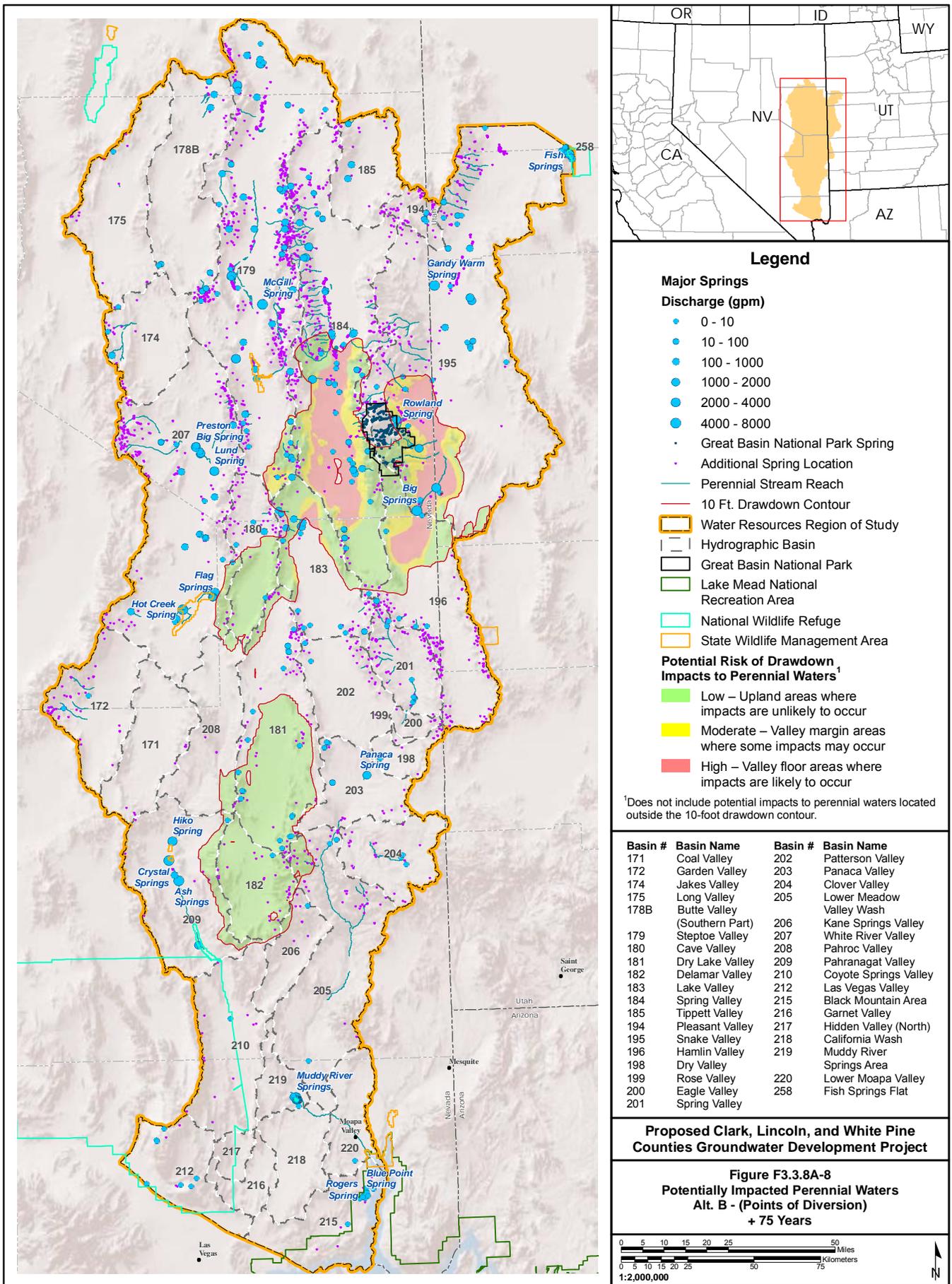
0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers

1:2,000,000

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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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
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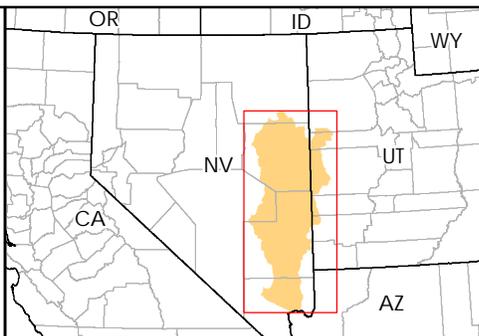
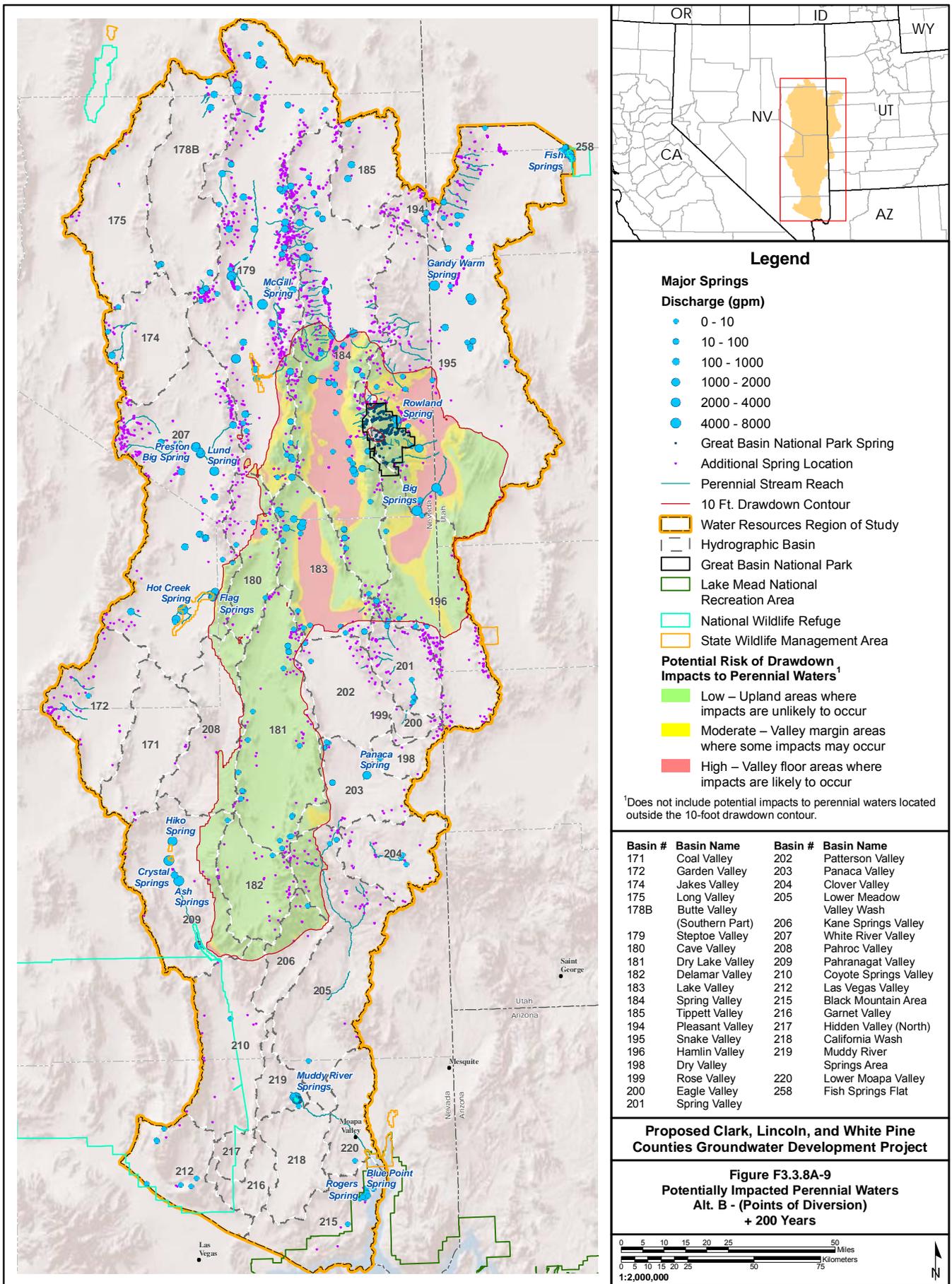
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-8**  
**Potentially Impacted Perennial Waters**  
**Alt. B - (Points of Diversion)**  
**+ 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers

1:2,000,000

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### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

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- ▭ Moderate – Valley margin areas where some impacts may occur
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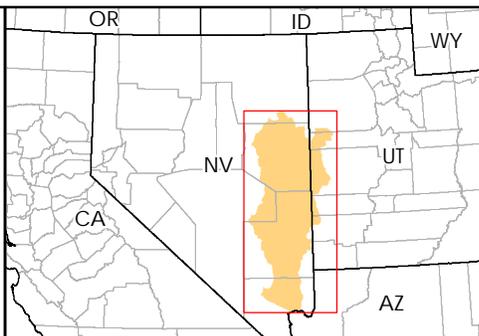
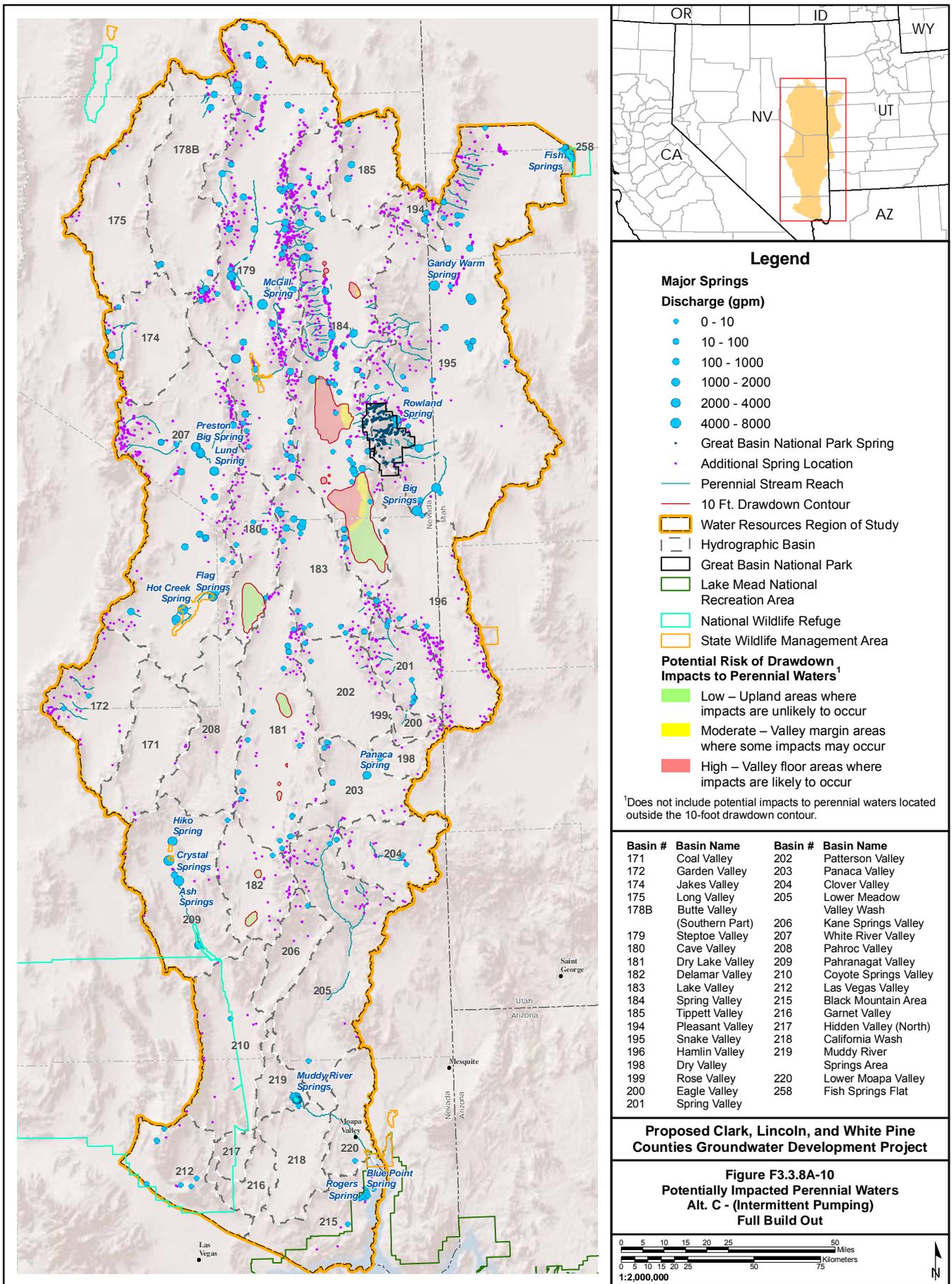
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-9**  
**Potentially Impacted Perennial Waters**  
**Alt. B - (Points of Diversion)**  
**+ 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
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<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

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199	Rose Valley	220	Lower Moapa Valley
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201	Spring Valley		

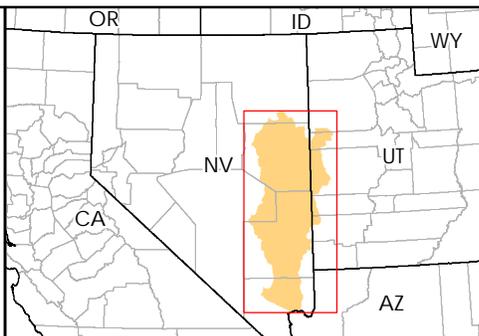
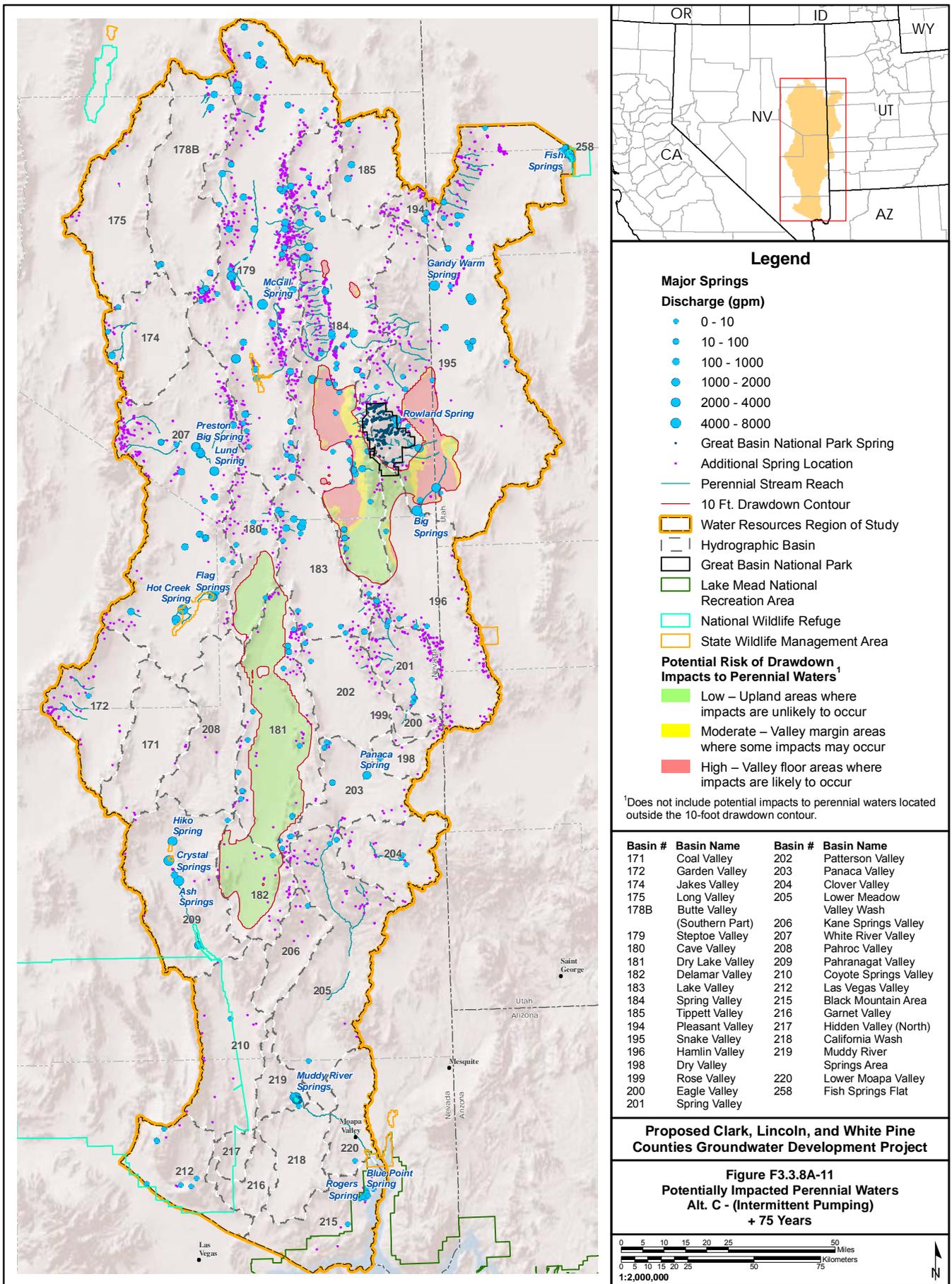
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-10**  
**Potentially Impacted Perennial Waters**  
**Alt. C - (Intermittent Pumping)**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters**

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- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

\*Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

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174	Jakes Valley	204	Clover Valley
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181	Dry Lake Valley	209	Pahrnagat Valley
182	Delamar Valley	210	Coyote Springs Valley
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185	Tippett Valley	216	Garnet Valley
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201	Spring Valley		

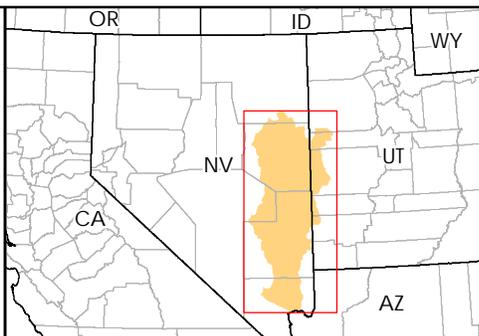
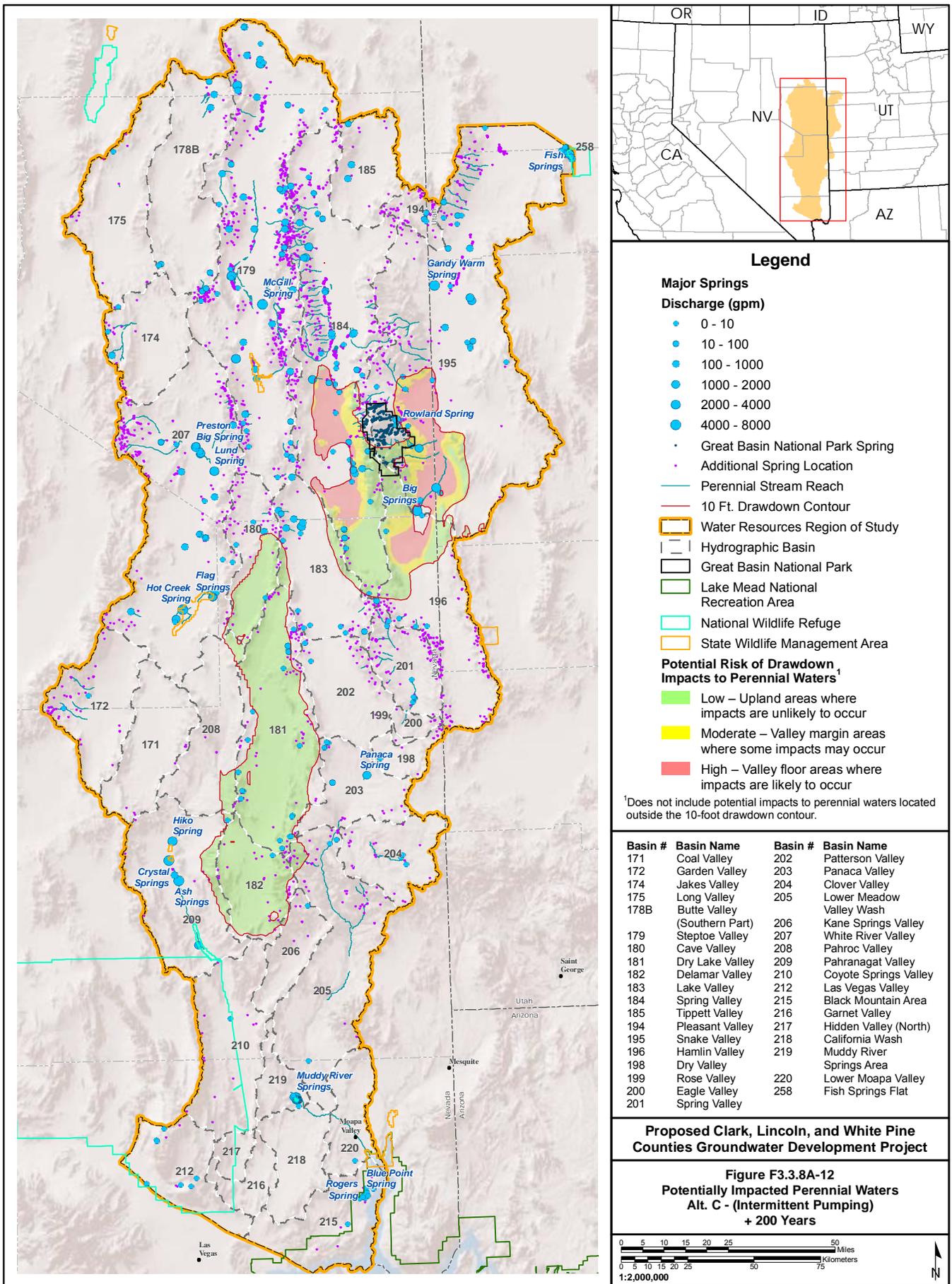
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-11**  
**Potentially Impacted Perennial Waters**  
**Alt. C - (Intermittent Pumping)**  
**+ 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

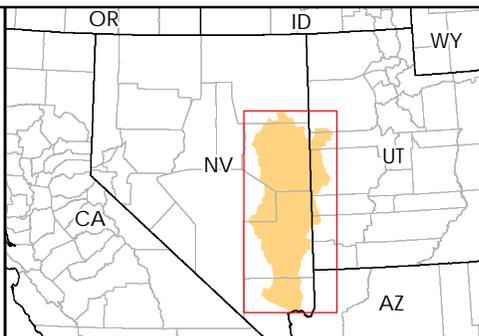
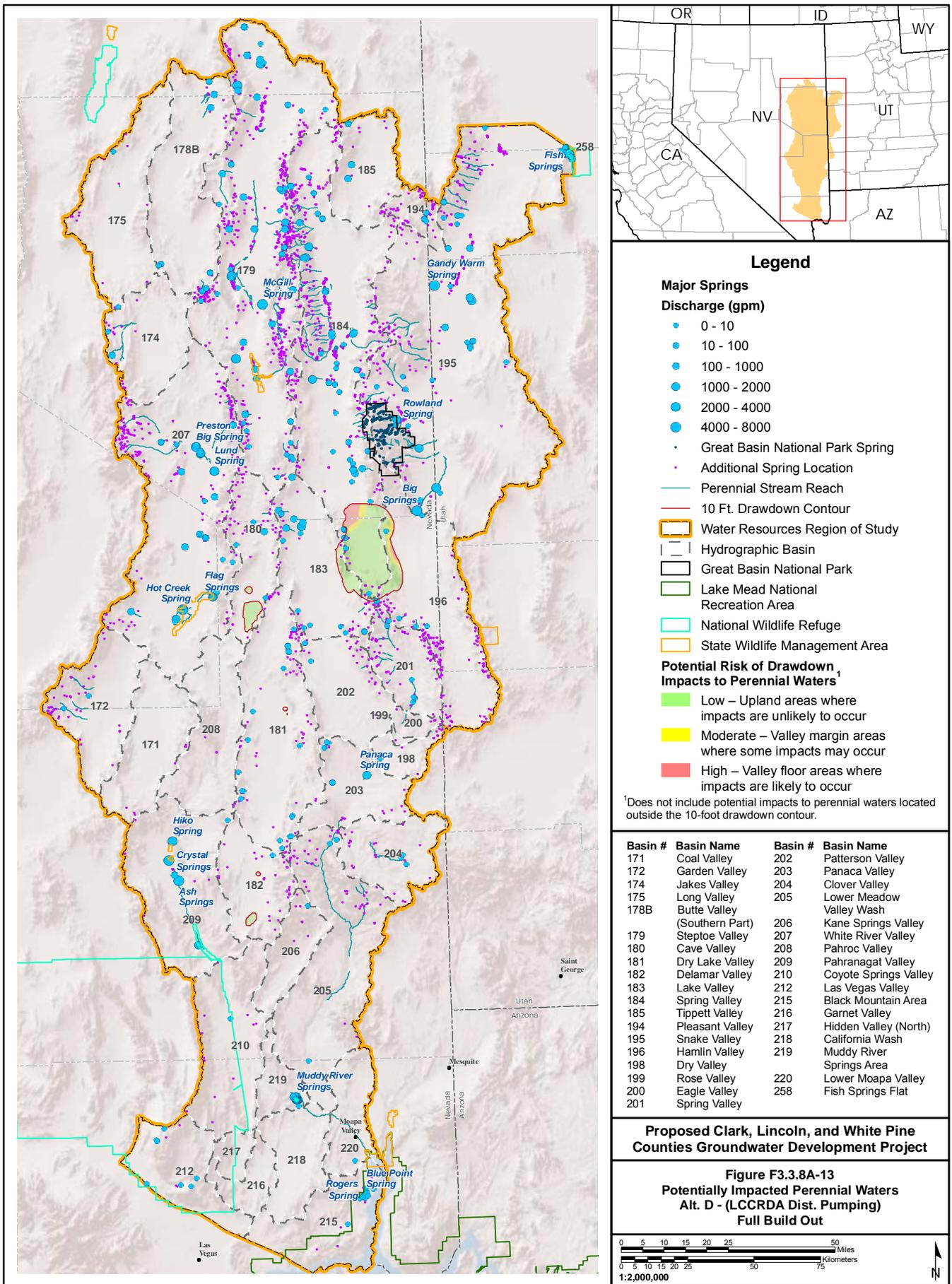
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-12**  
**Potentially Impacted Perennial Waters**  
**Alt. C - (Intermittent Pumping)**  
**+ 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

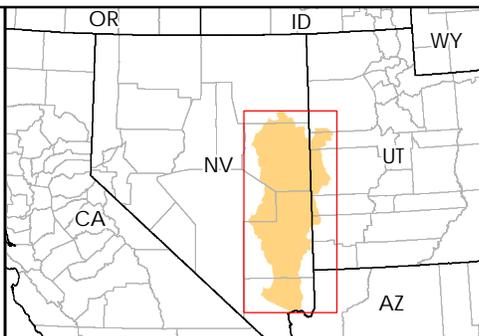
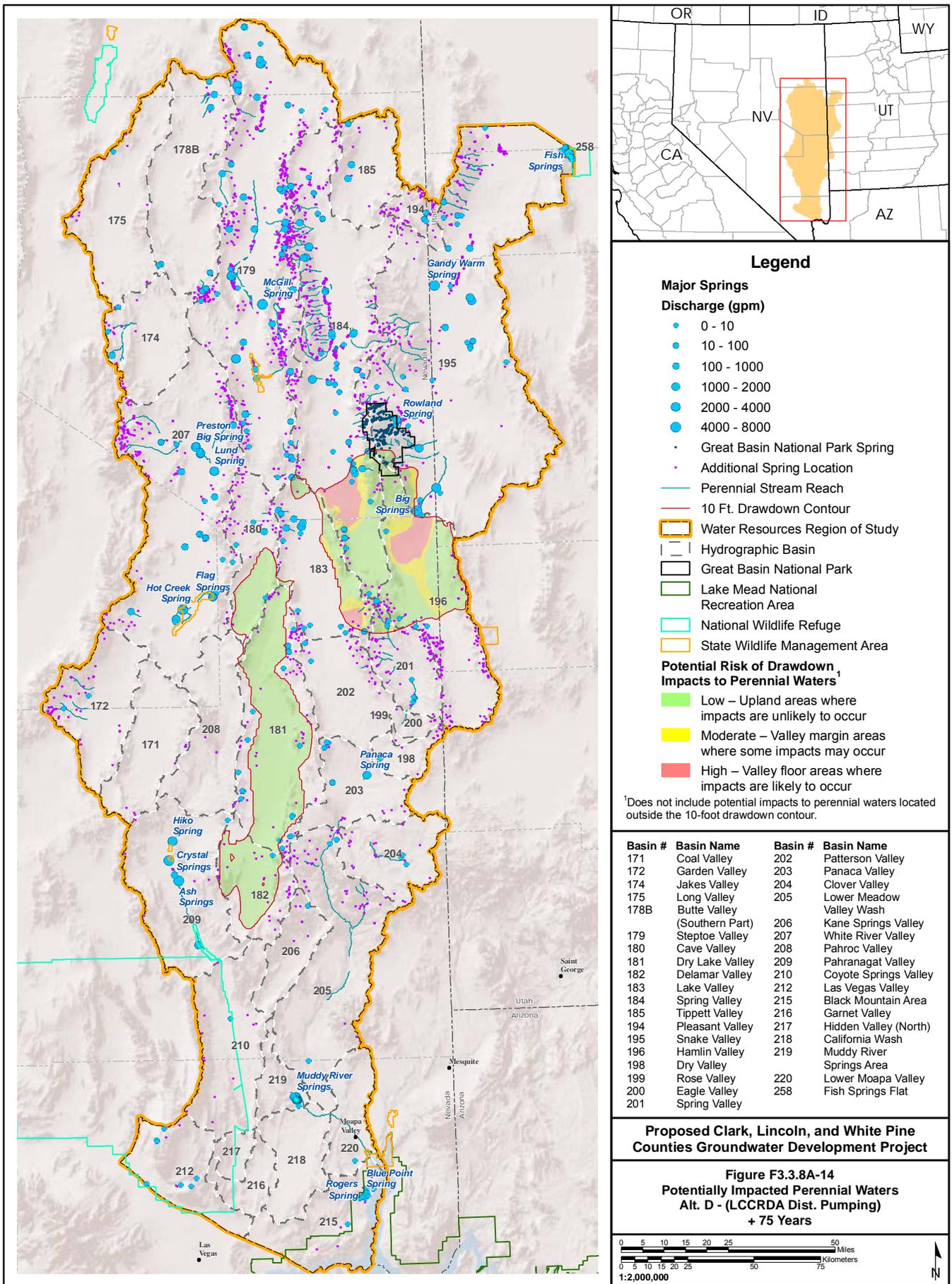
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-13**  
**Potentially Impacted Perennial Waters**  
**Alt. D - (LCCRDA Dist. Pumping)**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location
- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

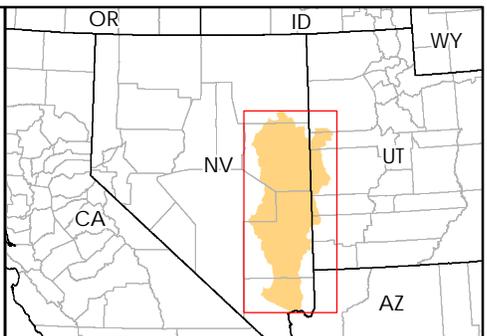
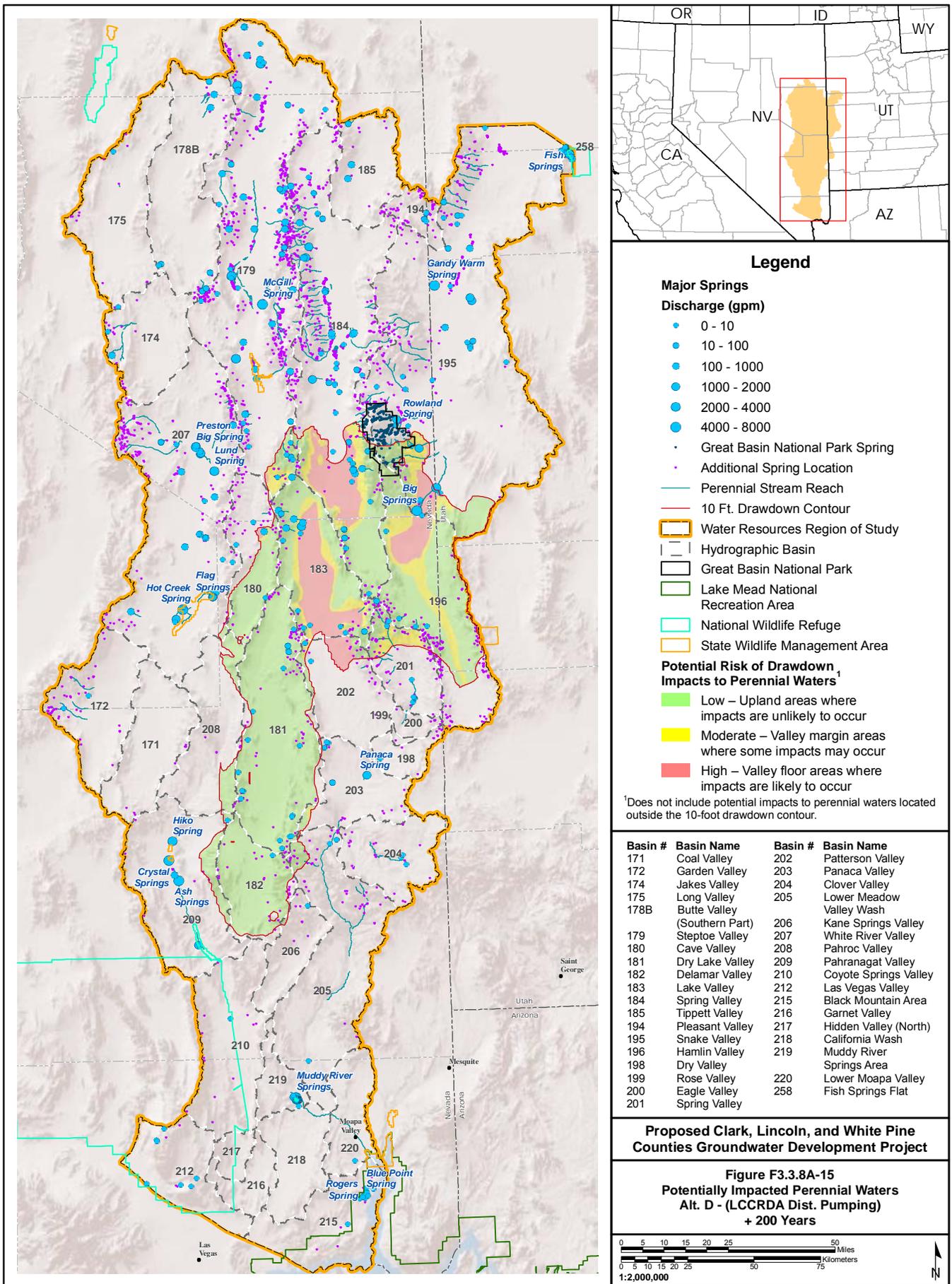
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-14**  
**Potentially Impacted Perennial Waters**  
**Alt. D - (LCCRDA Dist. Pumping)**  
**+ 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

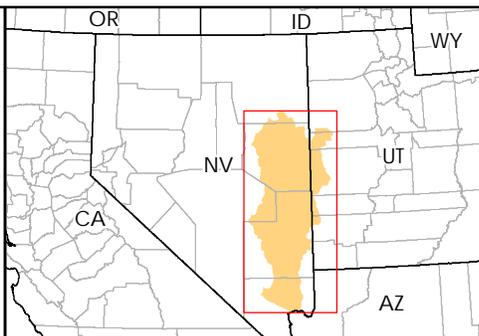
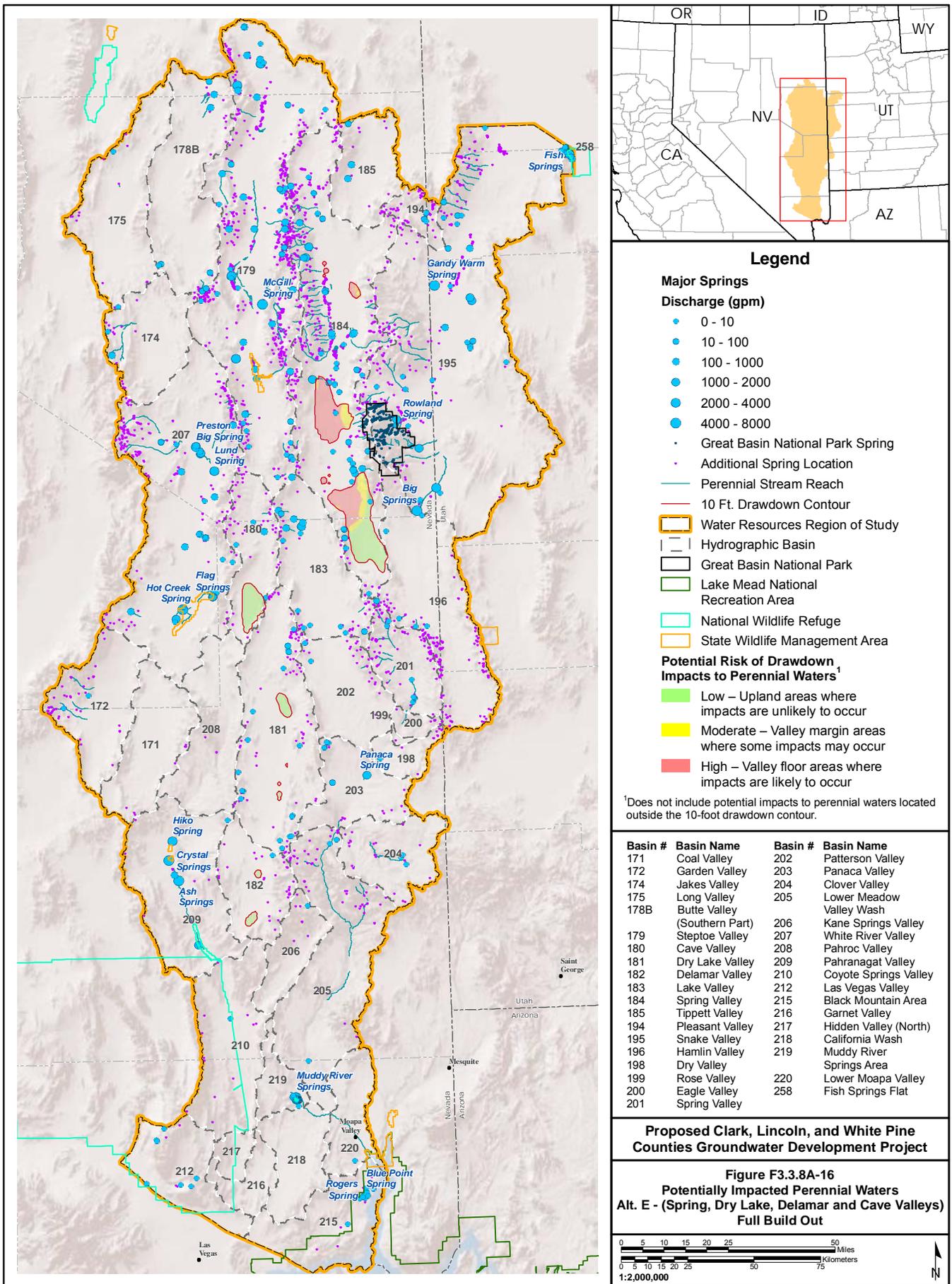
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-15**  
**Potentially Impacted Perennial Waters**  
**Alt. D - (LCCRDA Dist. Pumping)**  
**+ 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

Perennial Stream Reach

10 Ft. Drawdown Contour

Water Resources Region of Study

Hydrographic Basin

Great Basin National Park

Lake Mead National Recreation Area

National Wildlife Refuge

State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

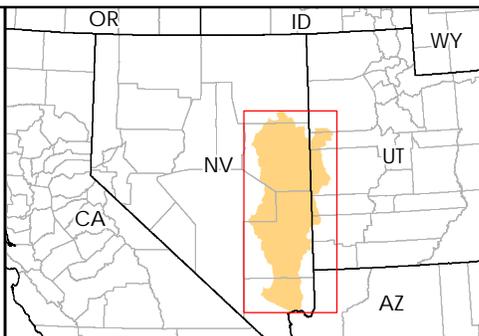
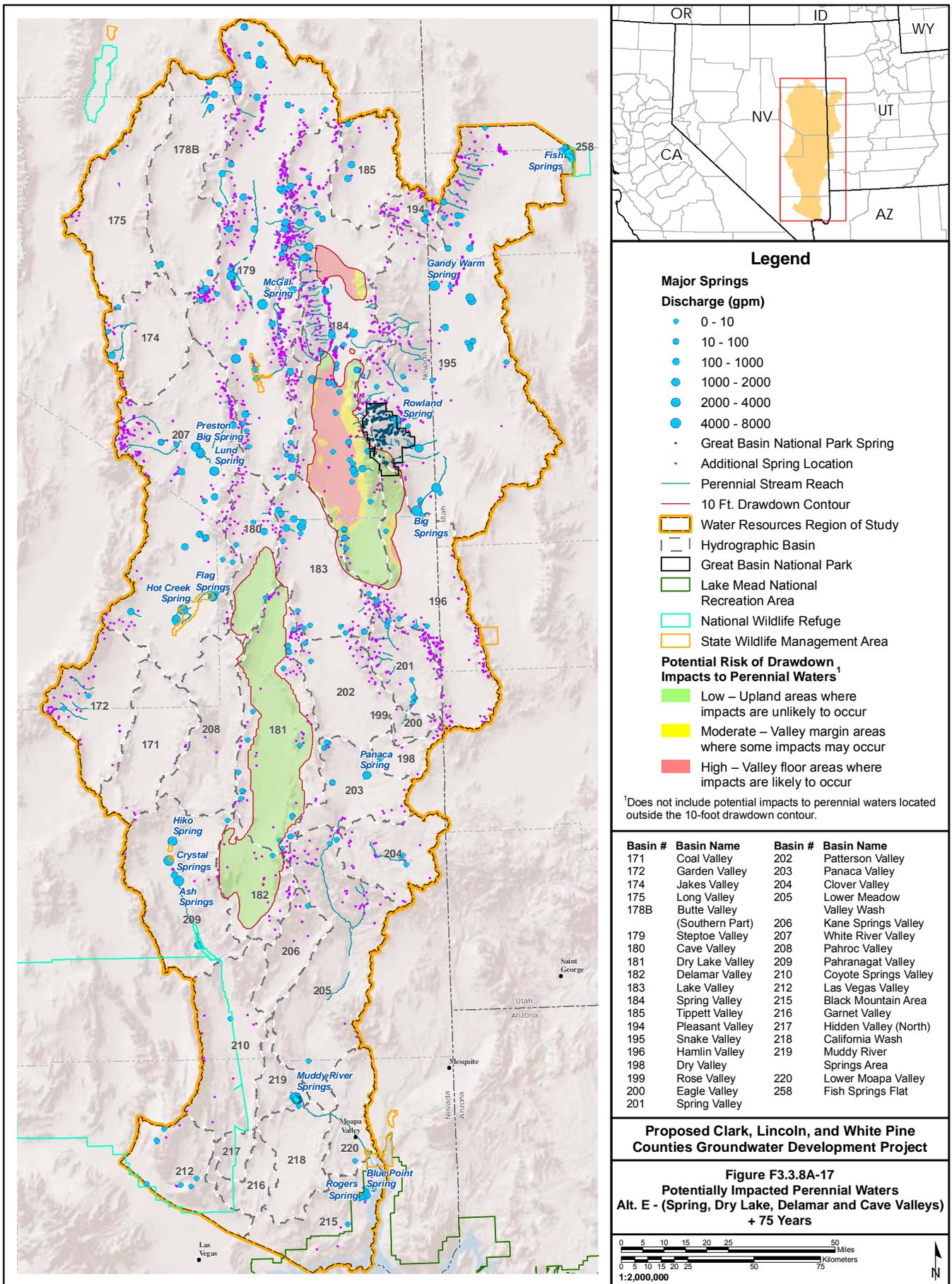
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahrnagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-16**  
**Potentially Impacted Perennial Waters**  
**Alt. E - (Spring, Dry Lake, Delamar and Cave Valleys)**  
**Full Build Out**



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.



**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

\*Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

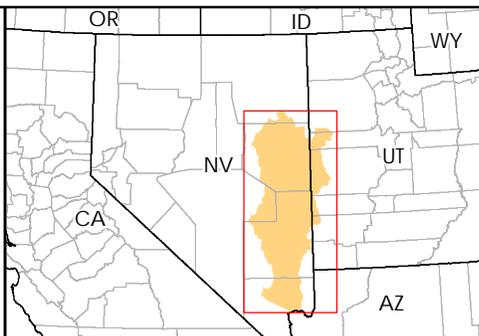
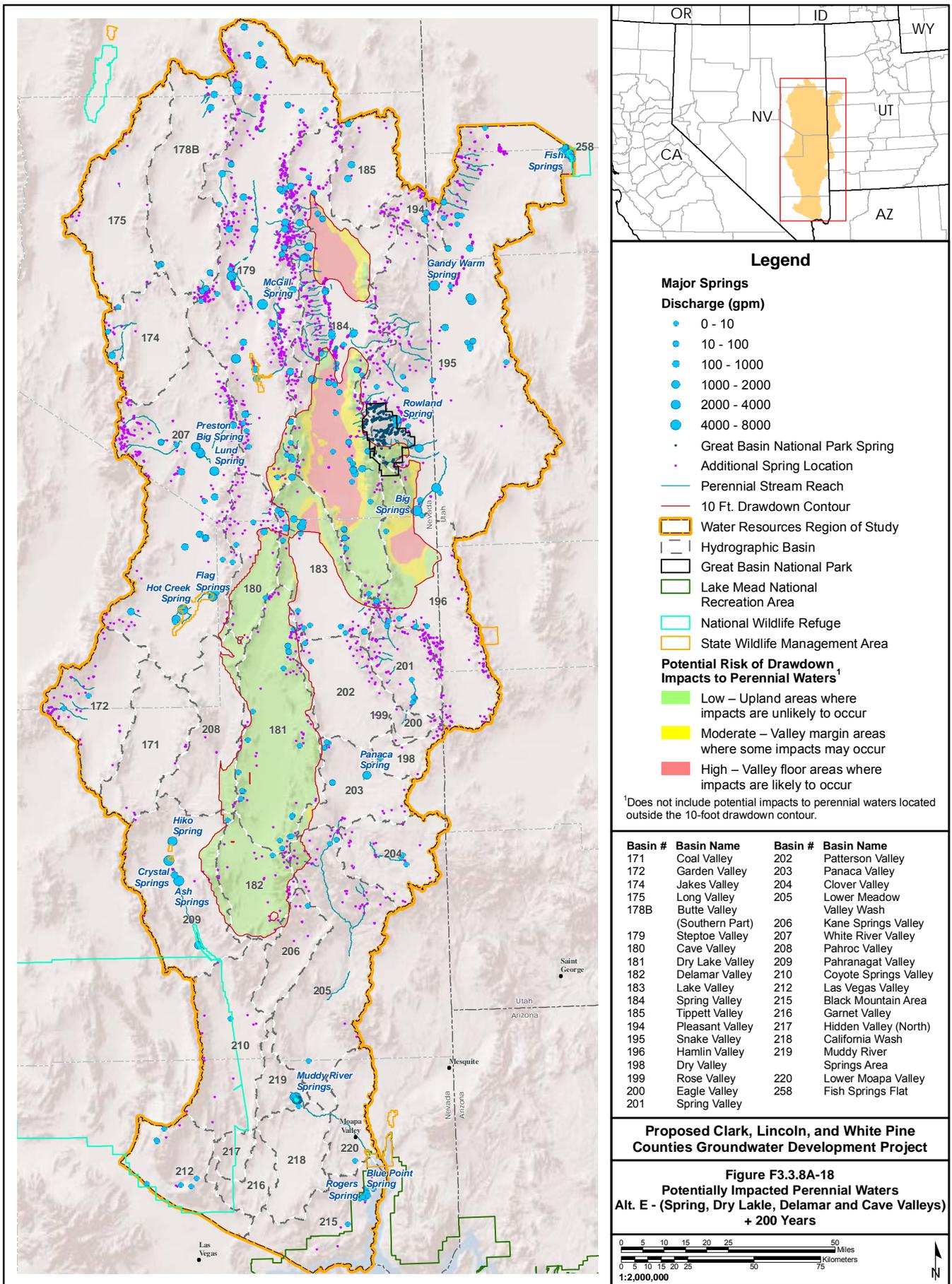
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-17**  
**Potentially Impacted Perennial Waters**  
**Alt. E - (Spring, Dry Lake, Delamar and Cave Valleys)**  
**+ 75 Years**



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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

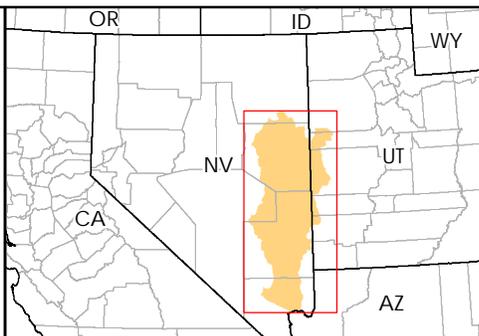
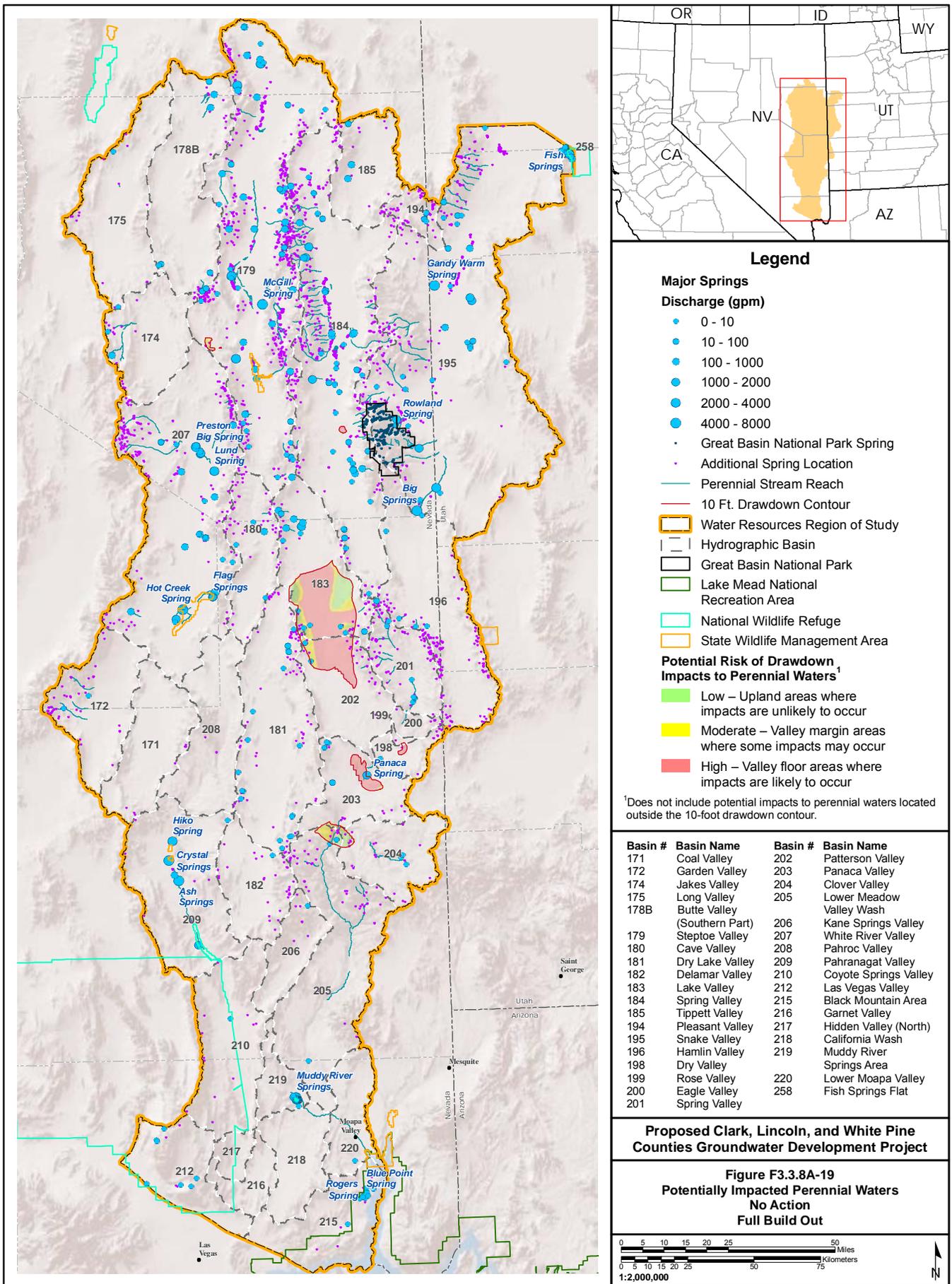
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8A-18**  
**Potentially Impacted Perennial Waters**  
**Alt. E - (Spring, Dry Lake, Delamar and Cave Valleys)**  
**+ 200 Years**



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.



**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

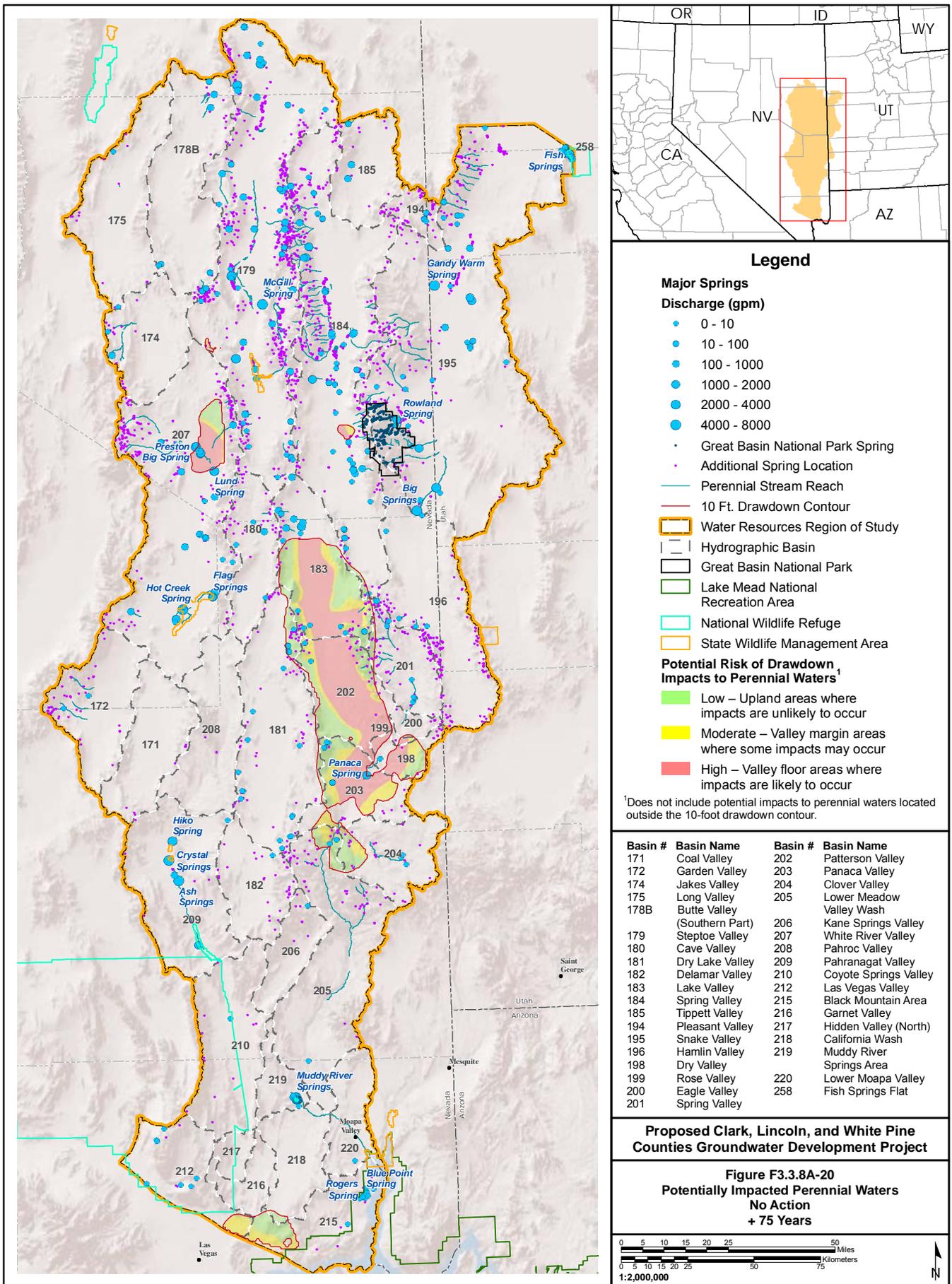
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahrnagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

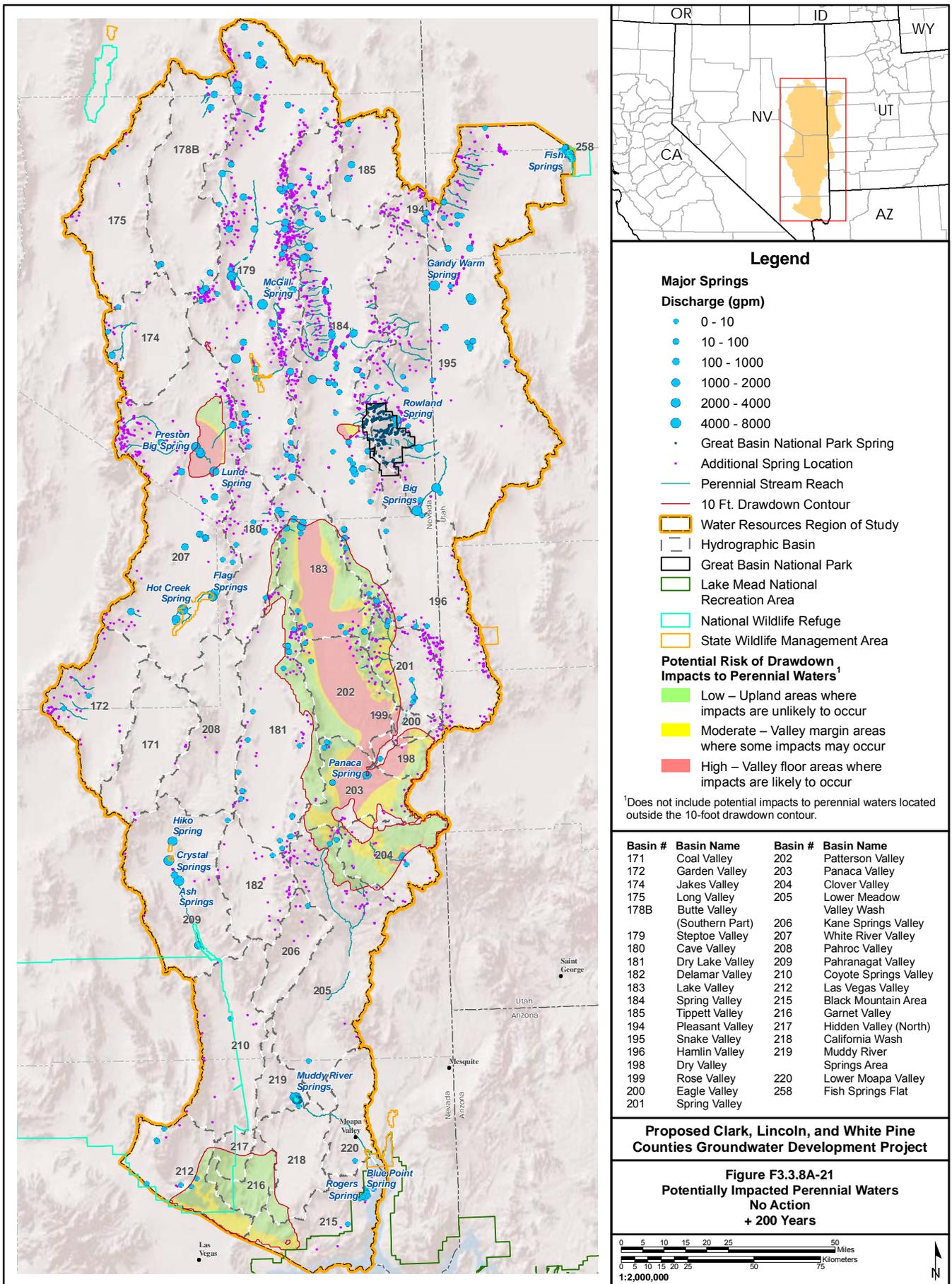
**Figure F3.3.8A-19**  
**Potentially Impacted Perennial Waters**  
**No Action**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

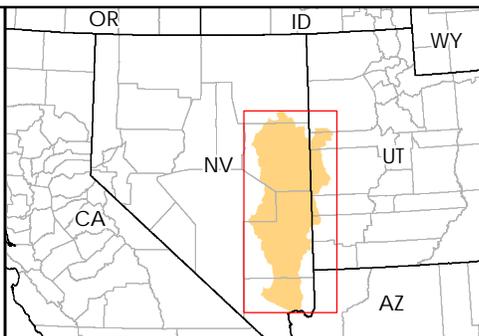
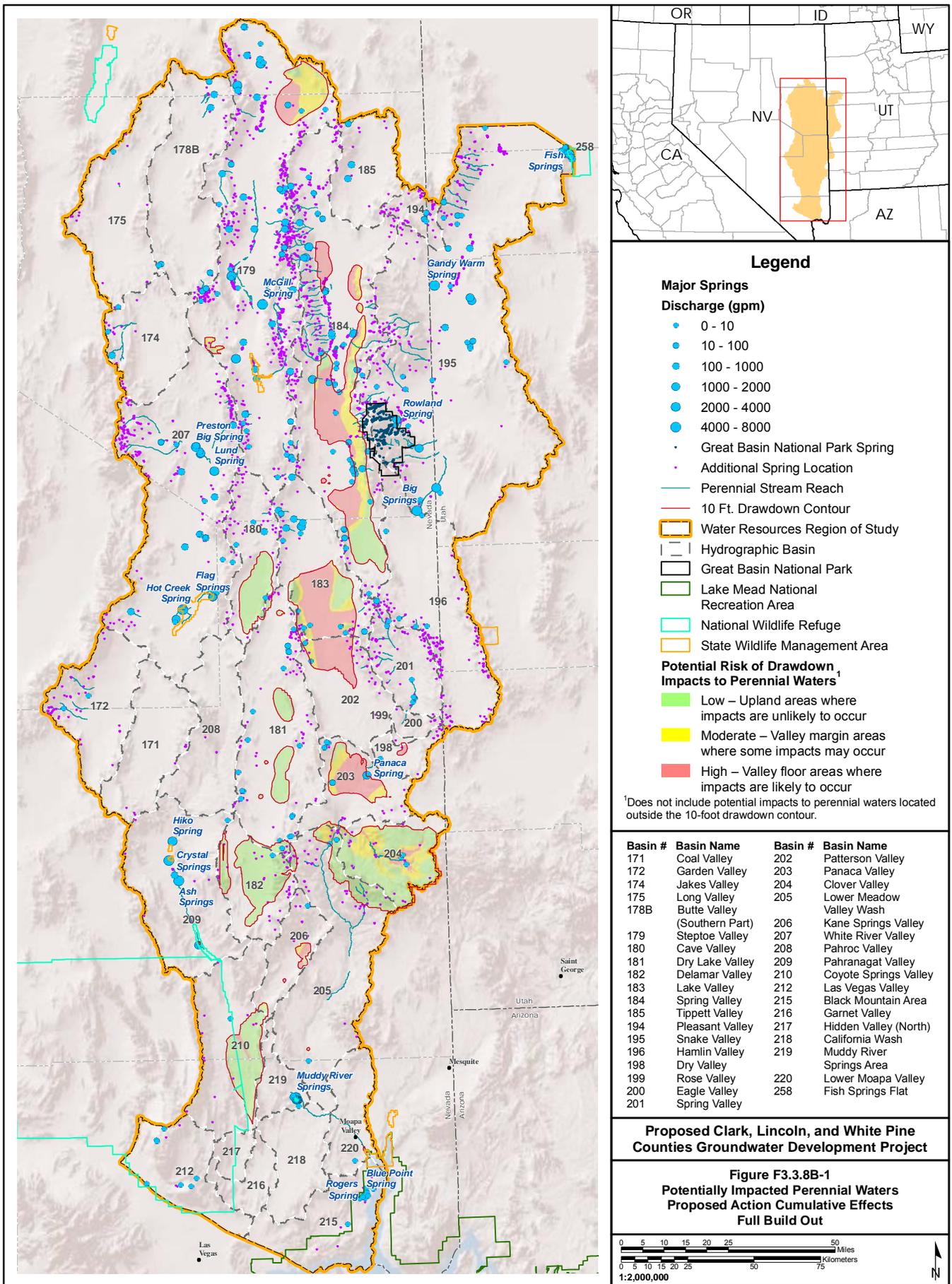
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**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
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181	Dry Lake Valley	209	Pahranagat Valley
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183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
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194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
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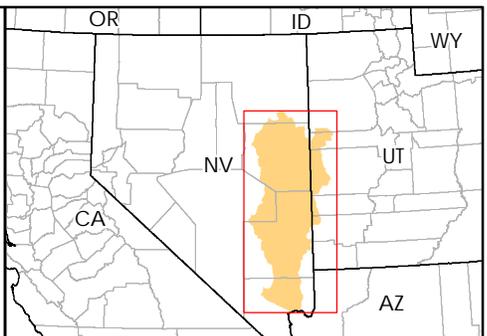
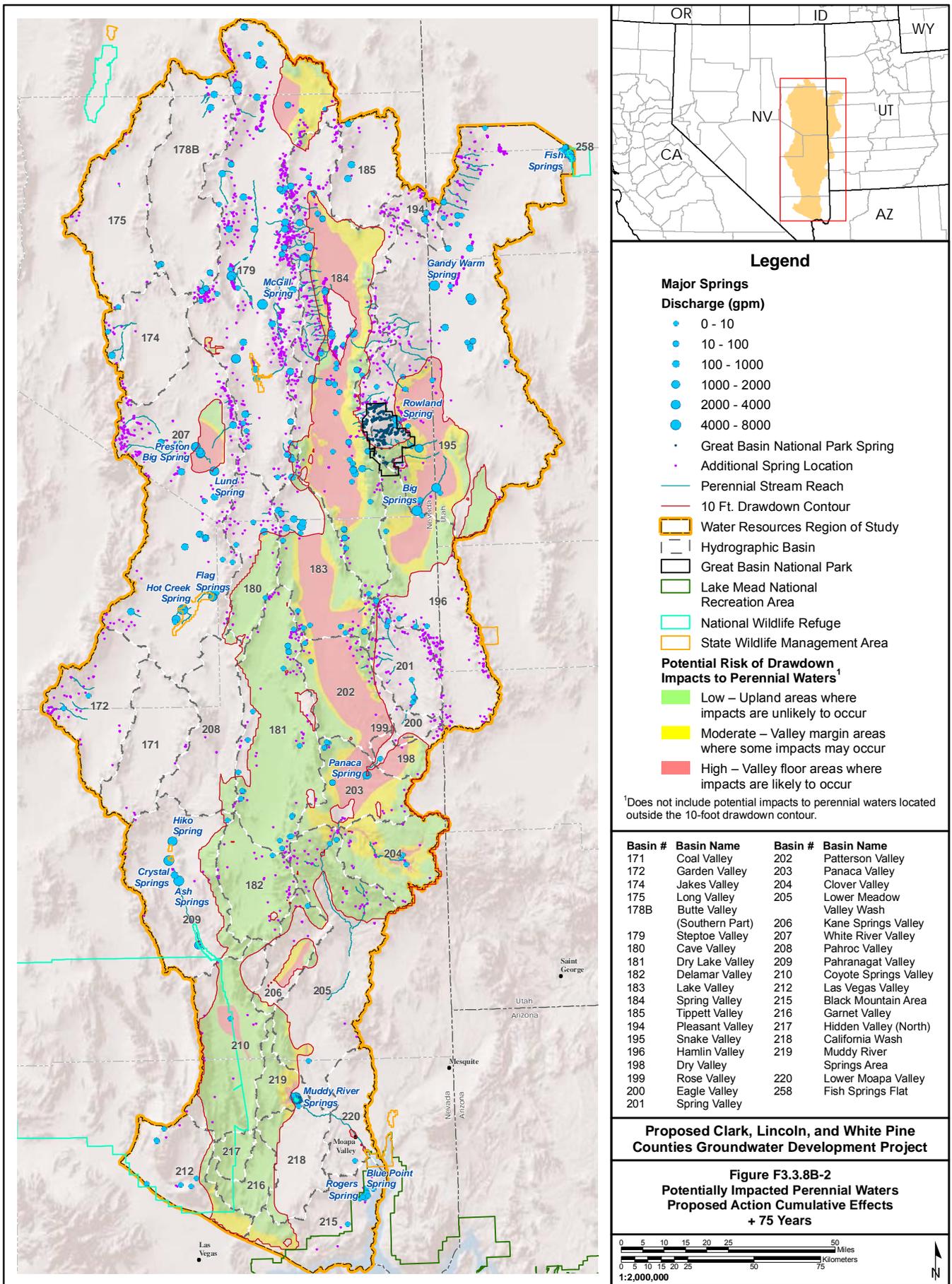
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-1**  
**Potentially Impacted Perennial Waters**  
**Proposed Action Cumulative Effects**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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**Legend**

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location
- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
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- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

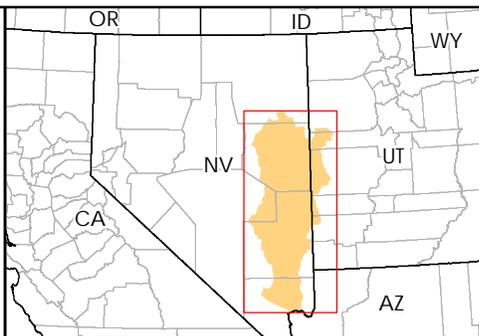
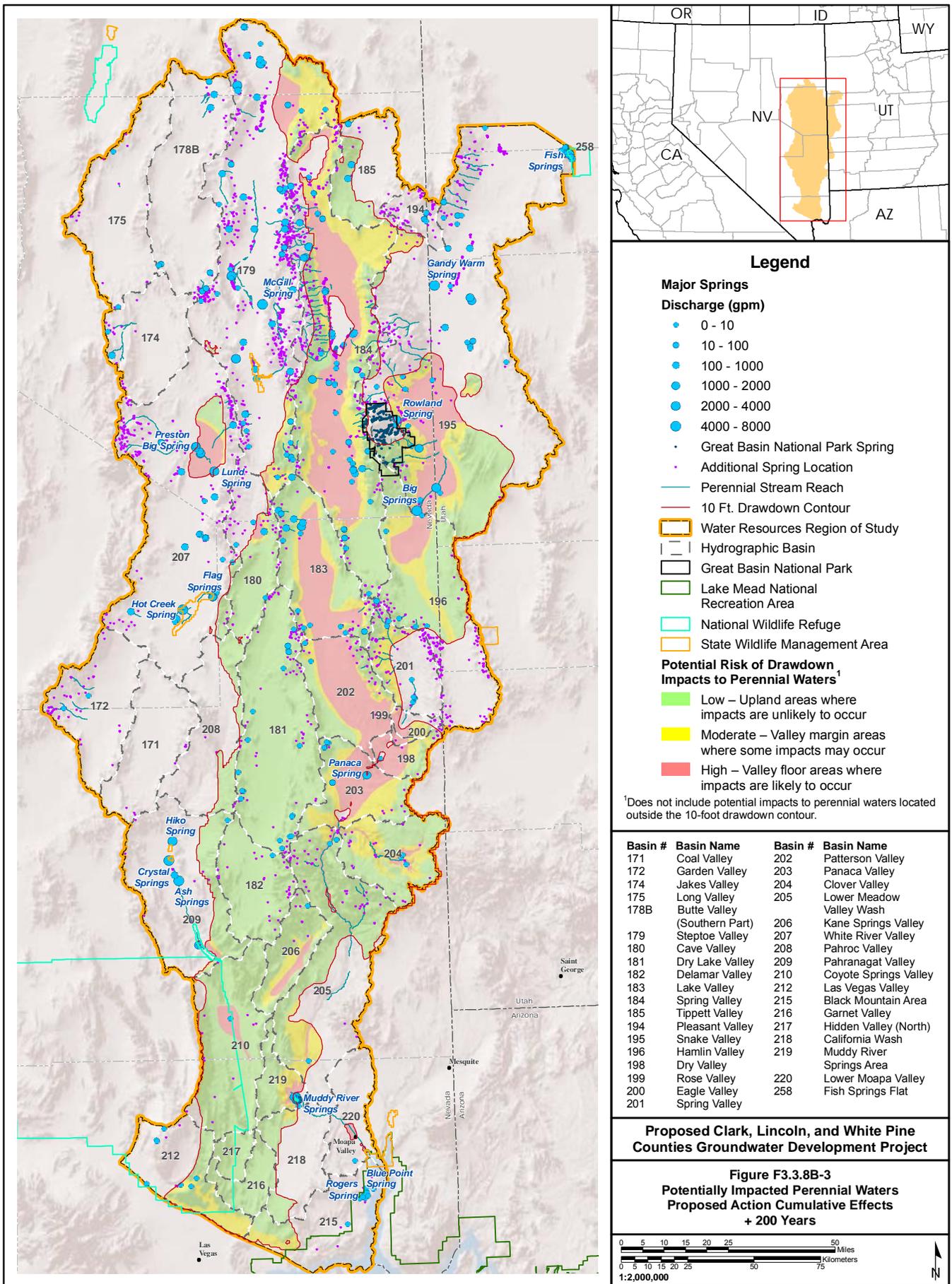
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-2**  
**Potentially Impacted Perennial Waters**  
**Proposed Action Cumulative Effects + 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

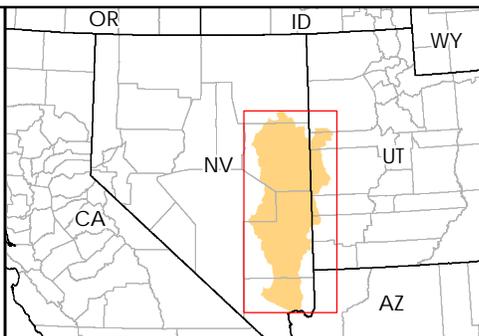
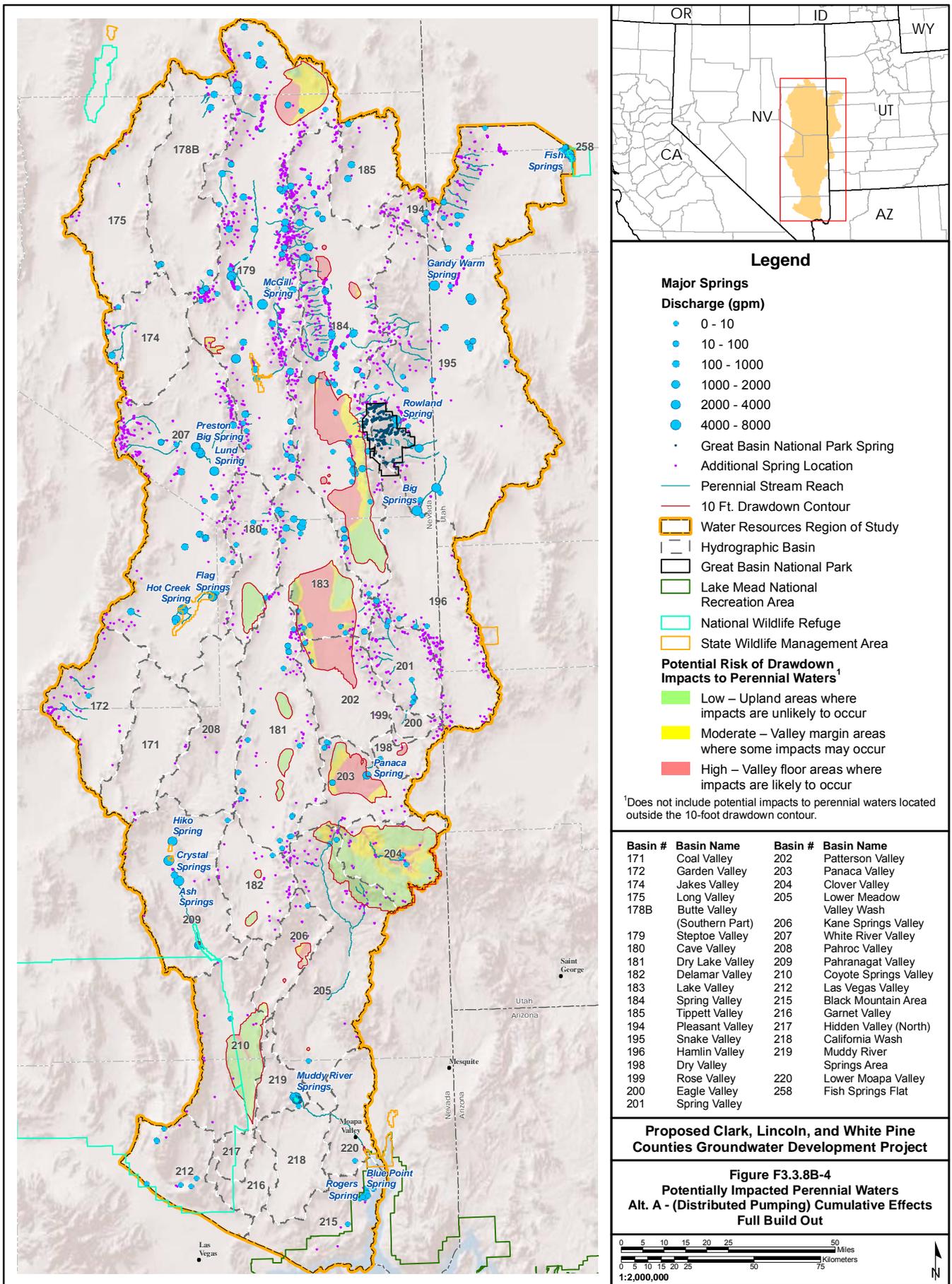
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-3**  
**Potentially Impacted Perennial Waters**  
**Proposed Action Cumulative Effects + 200 Years**



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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

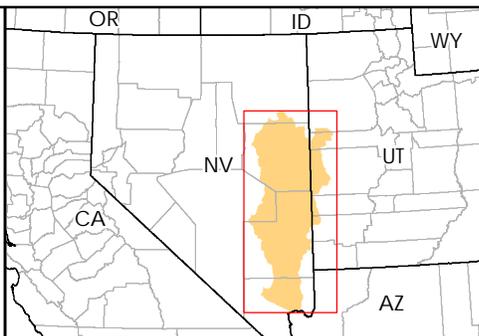
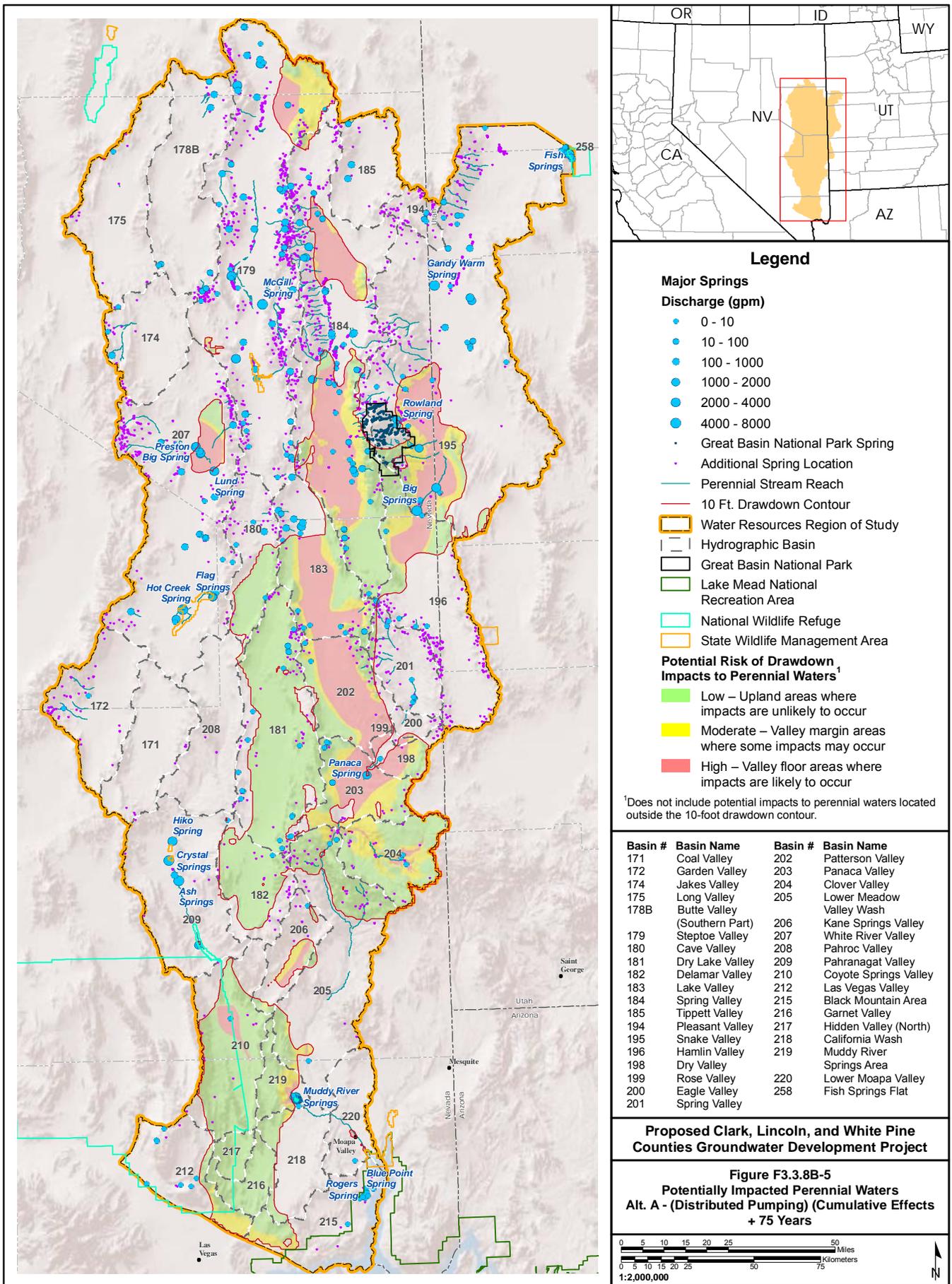
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-4**  
**Potentially Impacted Perennial Waters**  
**Alt. A - (Distributed Pumping) Cumulative Effects Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



**Legend**

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

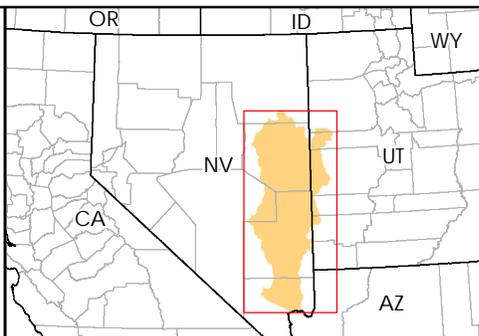
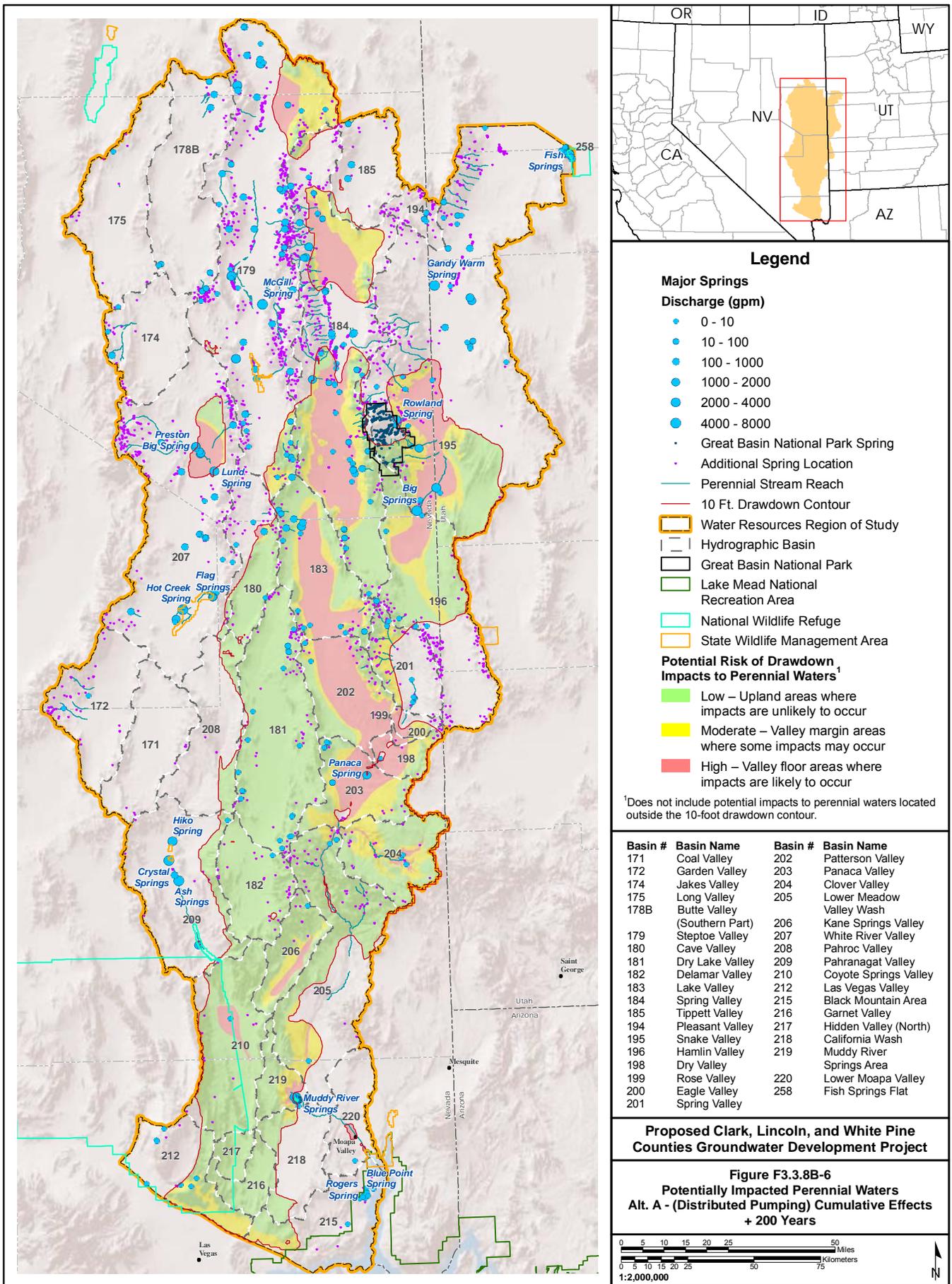
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-5**  
**Potentially Impacted Perennial Waters**  
**Alt. A - (Distributed Pumping) (Cumulative Effects + 75 Years)**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers  
 1:2,000,000

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.



**Legend**

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

— Water Resources Region of Study

— Hydrographic Basin

— Great Basin National Park

— Lake Mead National Recreation Area

— National Wildlife Refuge

— State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

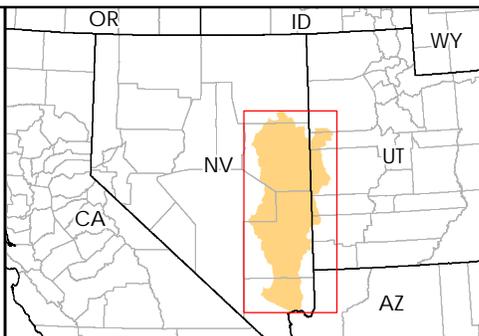
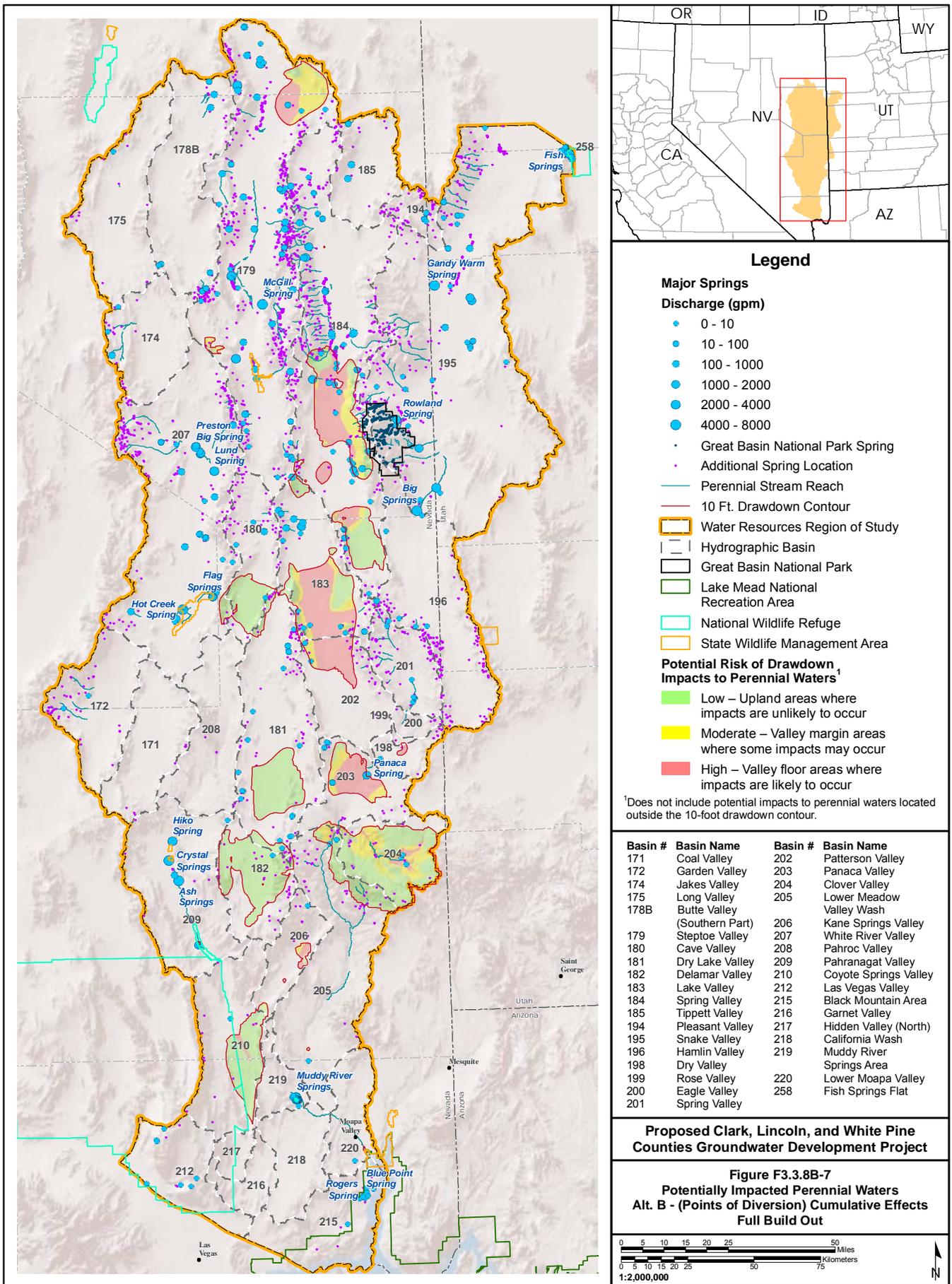
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahrnagat Valley
182	Delamar Valley	210	Coyote Springs Valley
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184	Spring Valley	215	Black Mountain Area
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194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-6**  
**Potentially Impacted Perennial Waters**  
**Alt. A - (Distributed Pumping) Cumulative Effects + 200 Years**



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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

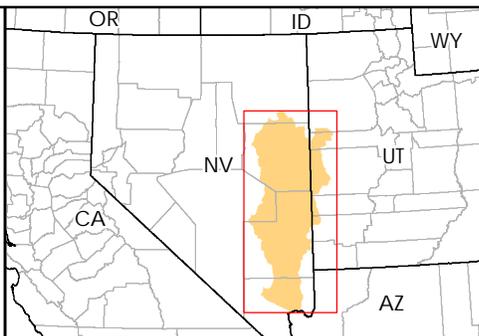
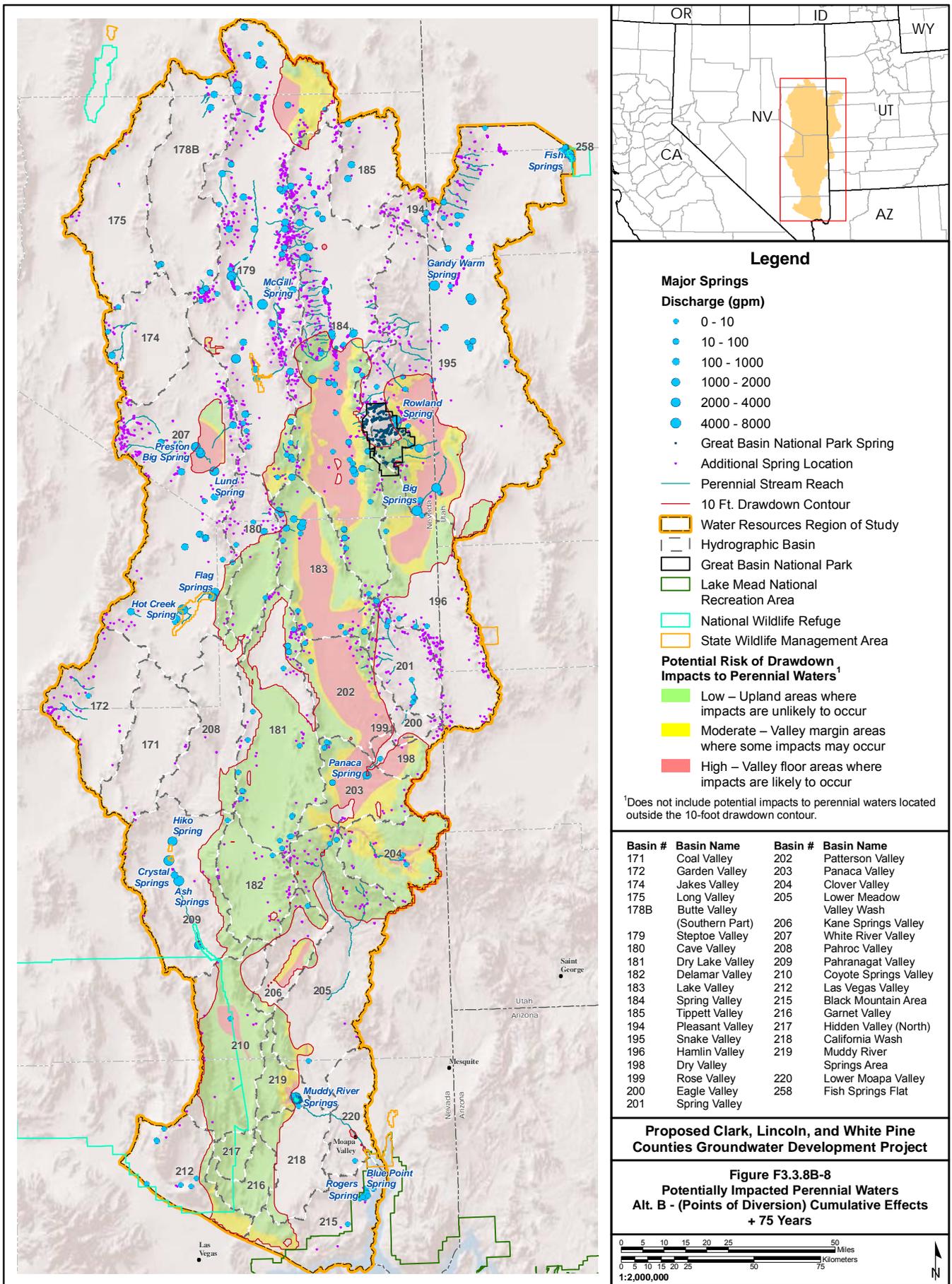
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
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181	Dry Lake Valley	209	Pahranagat Valley
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184	Spring Valley	215	Black Mountain Area
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194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-7**  
**Potentially Impacted Perennial Waters**  
**Alt. B - (Points of Diversion) Cumulative Effects**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

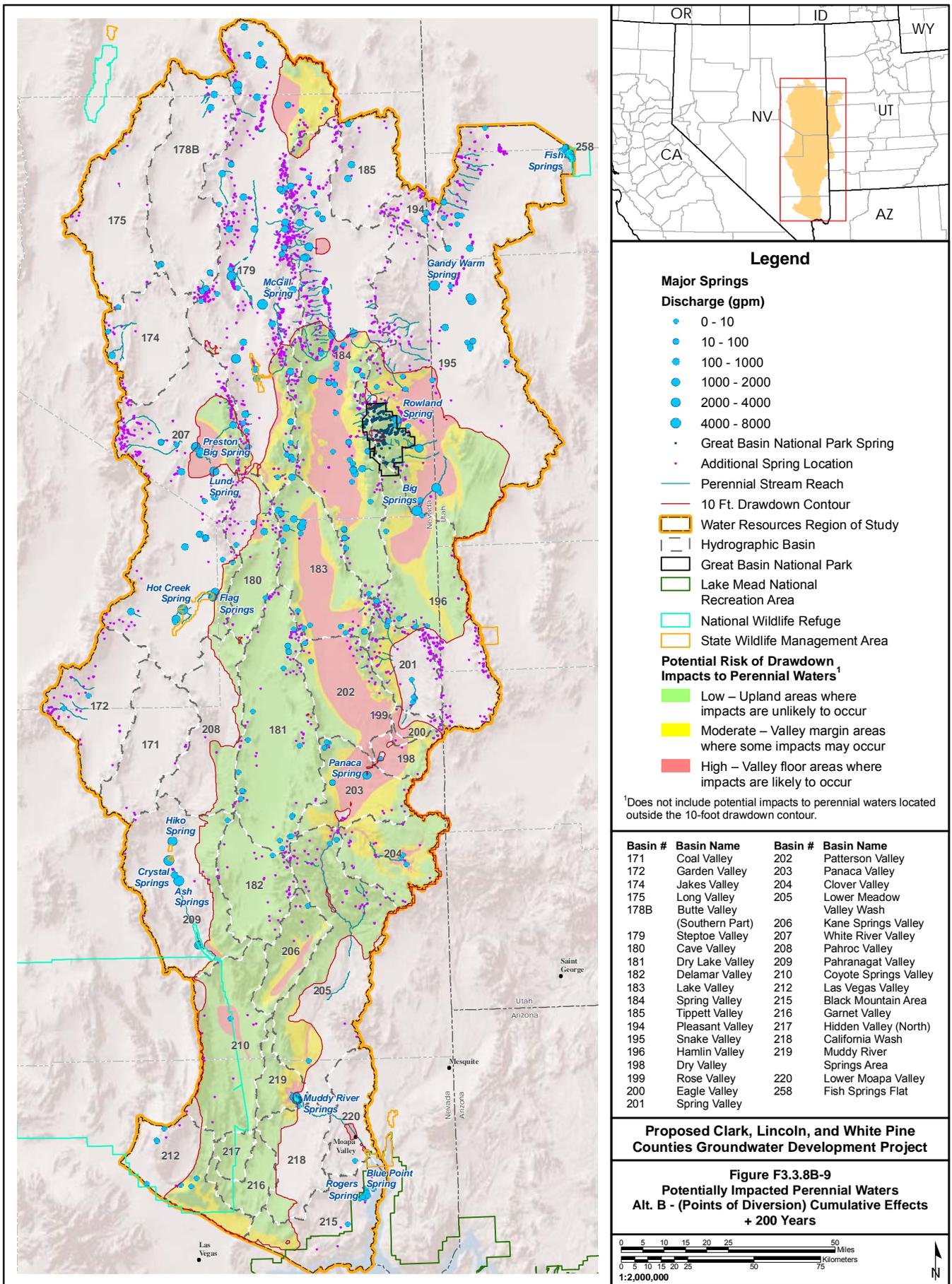
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-8**  
**Potentially Impacted Perennial Waters**  
**Alt. B - (Points of Diversion) Cumulative Effects + 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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.



**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
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180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

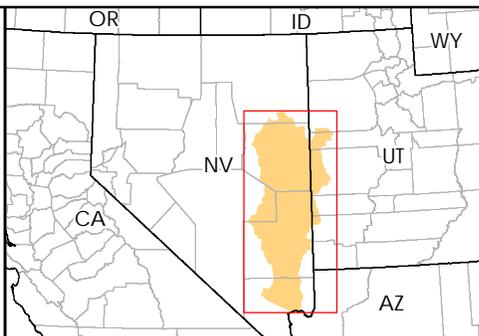
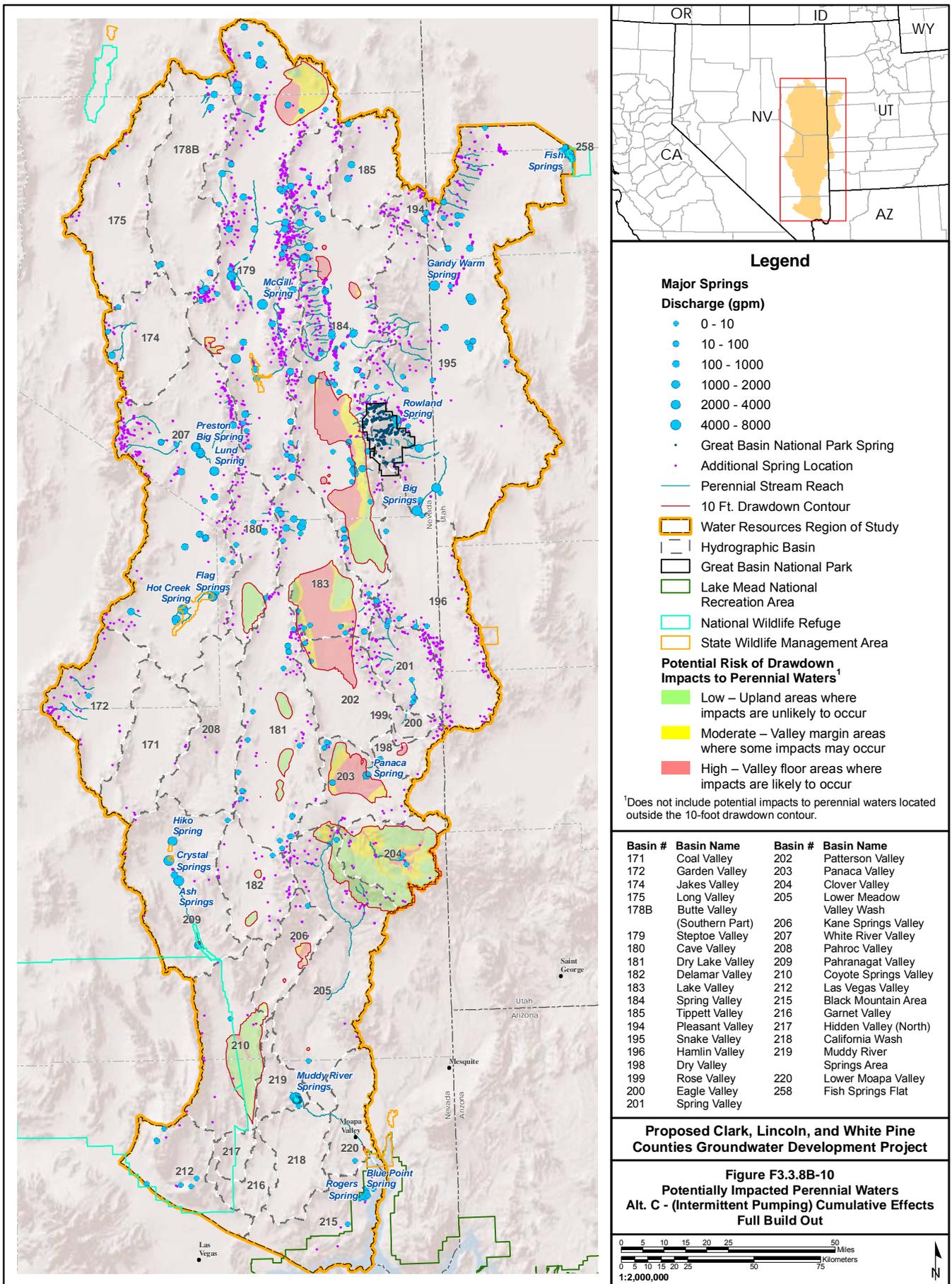
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-9**  
**Potentially Impacted Perennial Waters**  
**Alt. B - (Points of Diversion) Cumulative Effects + 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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.



**Legend**

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

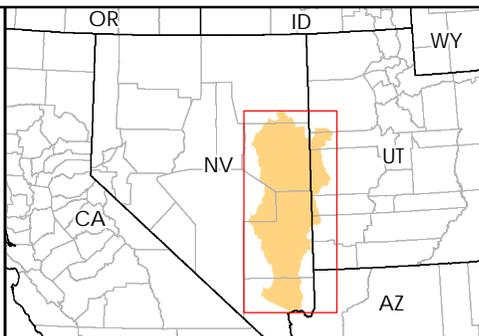
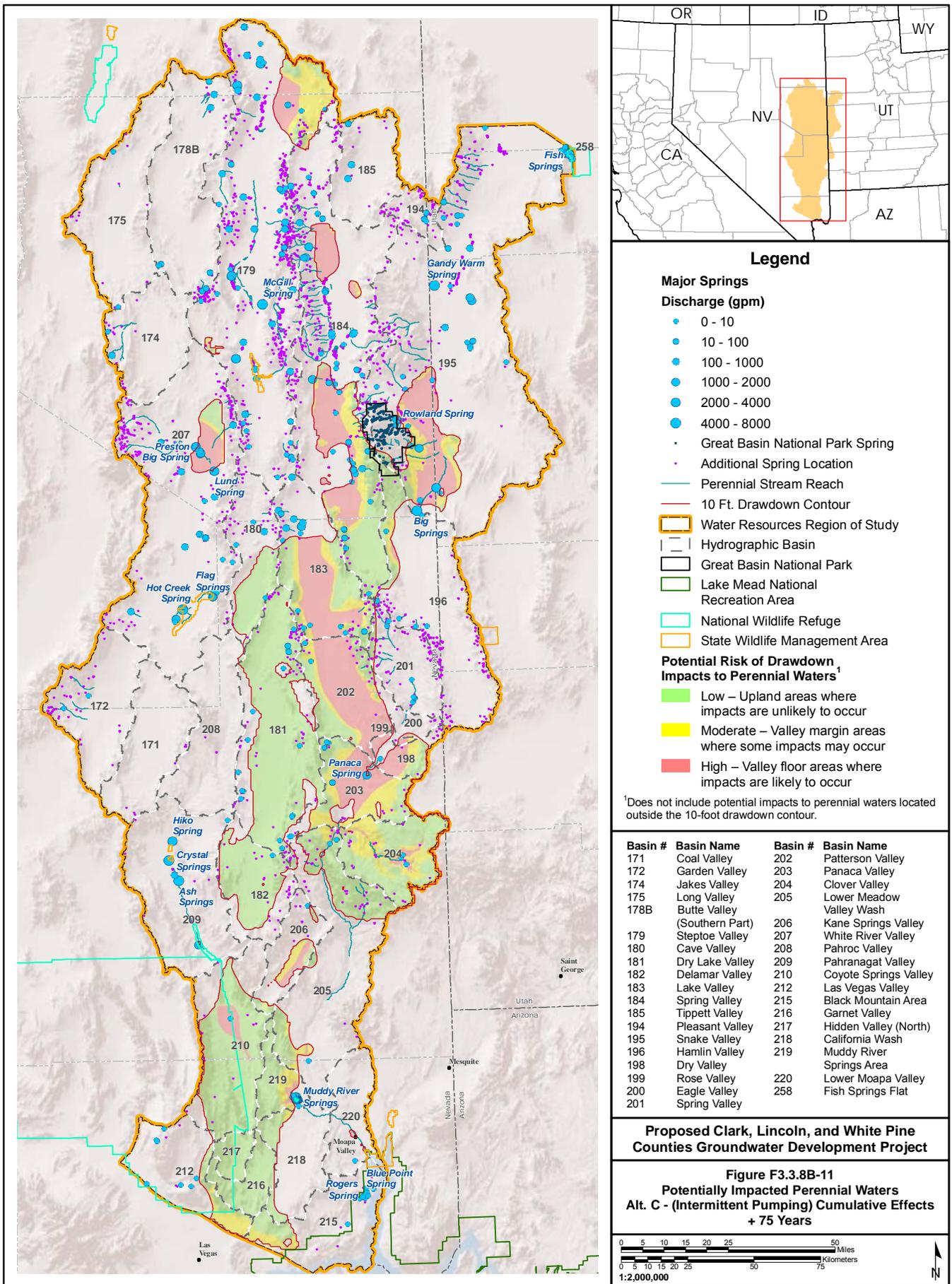
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-10**  
**Potentially Impacted Perennial Waters**  
**Alt. C - (Intermittent Pumping) Cumulative Effects**  
**Full Build Out**



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.



**Legend**

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

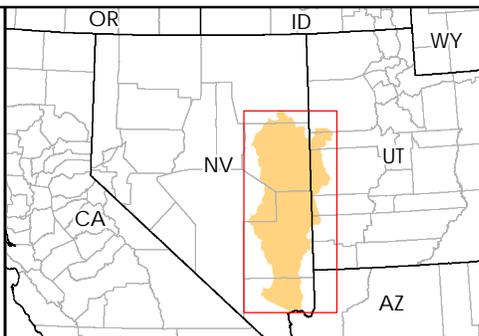
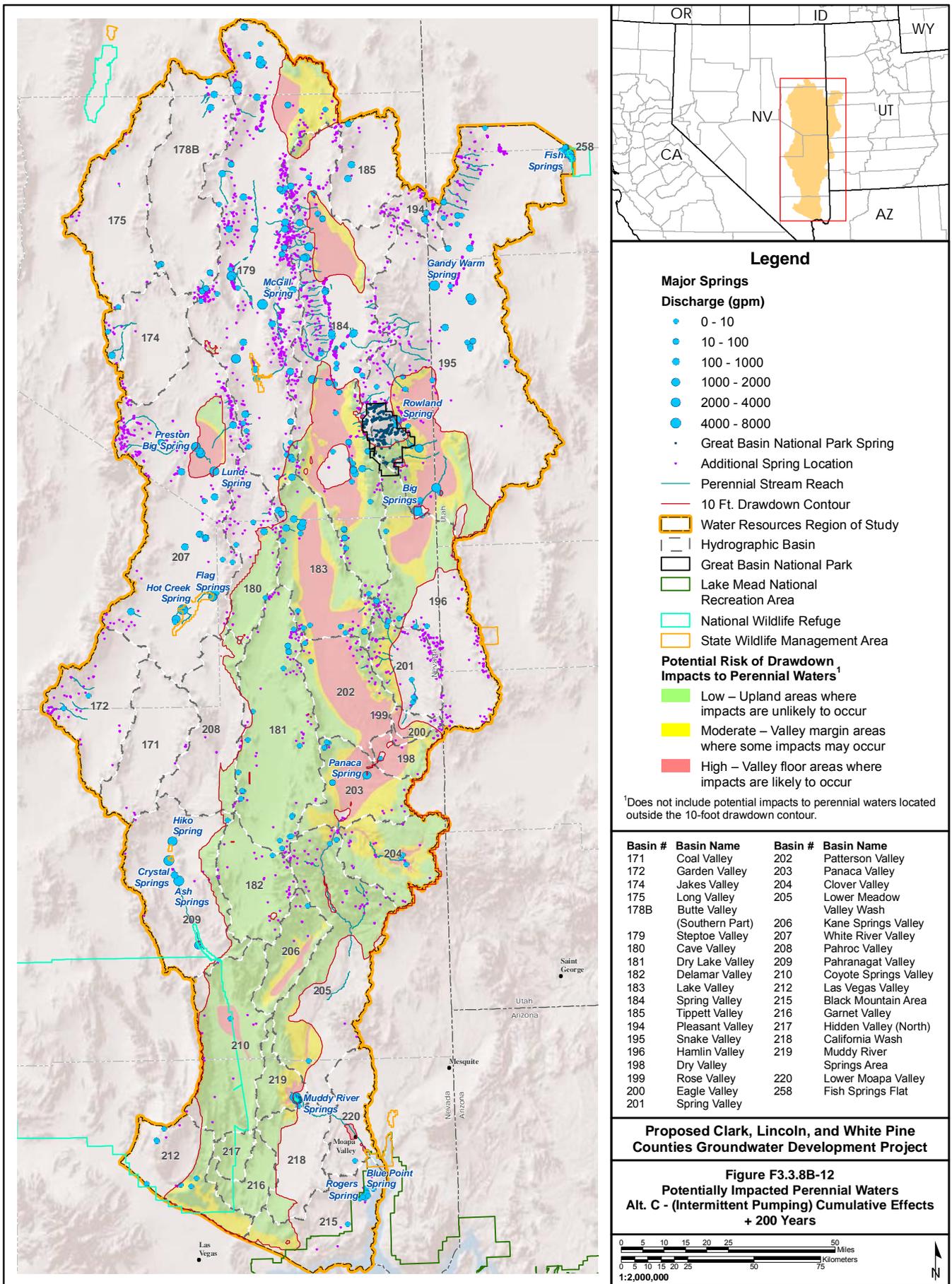
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
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184	Spring Valley	215	Black Mountain Area
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194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-11**  
**Potentially Impacted Perennial Waters**  
**Alt. C - (Intermittent Pumping) Cumulative Effects + 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

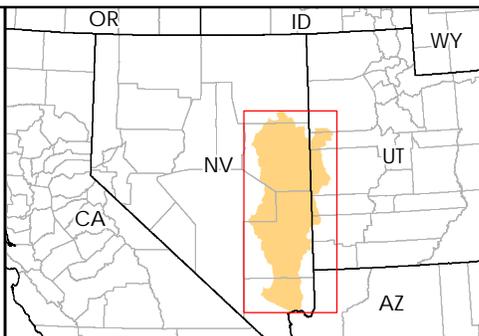
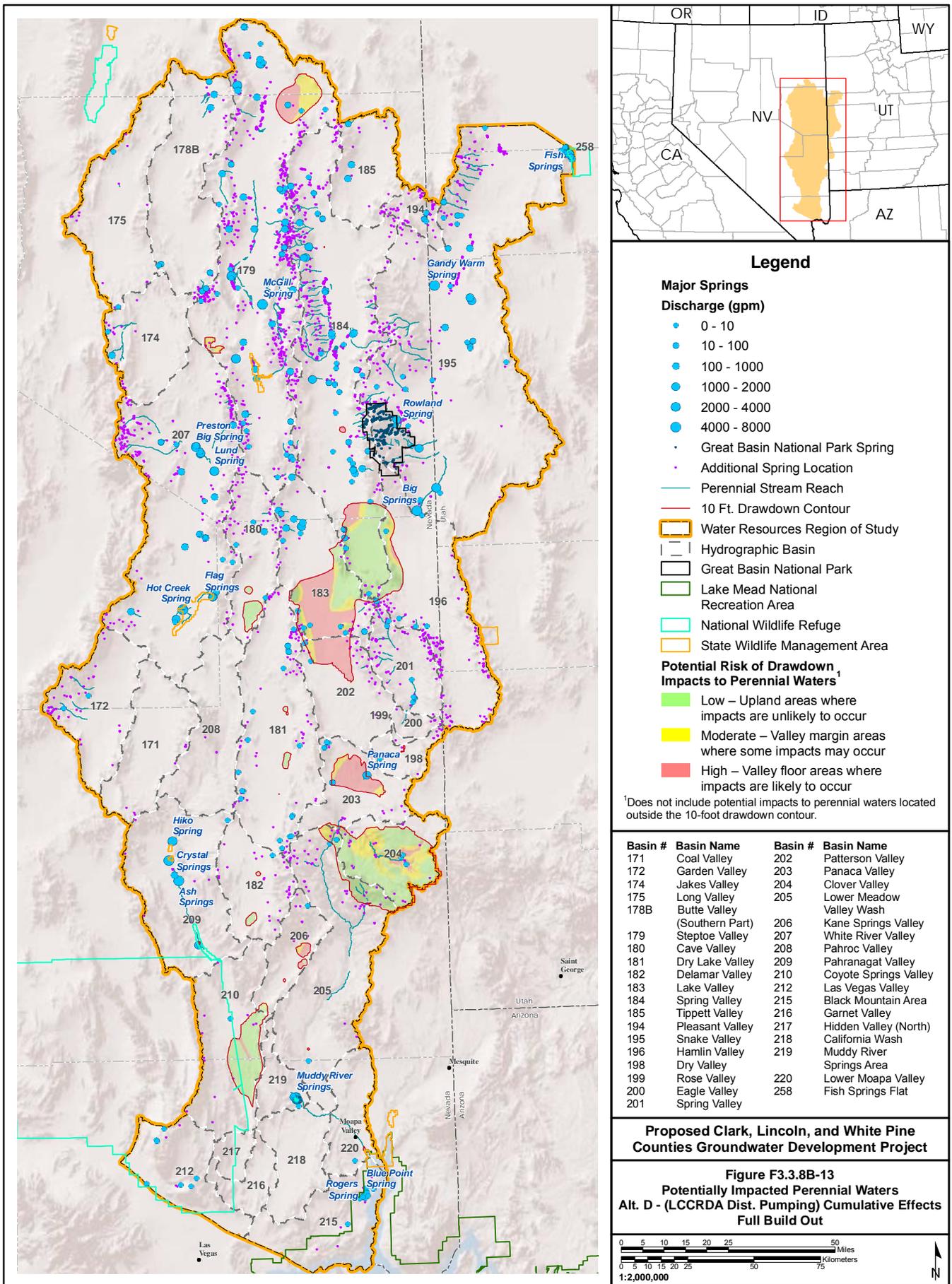
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranaगत Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-12**  
**Potentially Impacted Perennial Waters**  
**Alt. C - (Intermittent Pumping) Cumulative Effects + 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

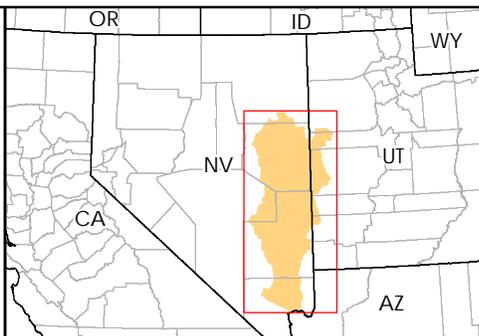
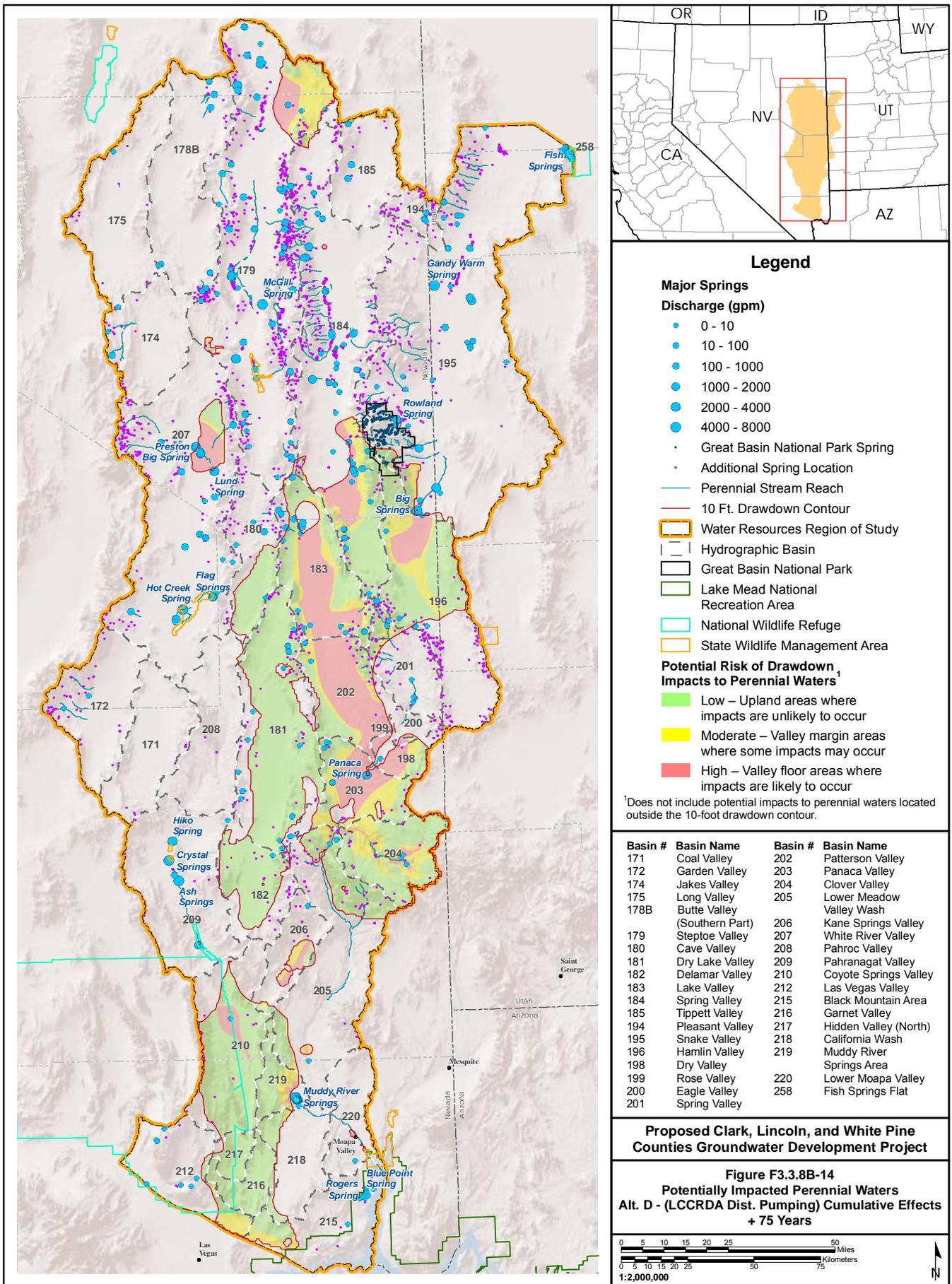
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-13**  
**Potentially Impacted Perennial Waters**  
**Alt. D - (LCCRDA Dist. Pumping) Cumulative Effects**  
**Full Build Out**



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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location
- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

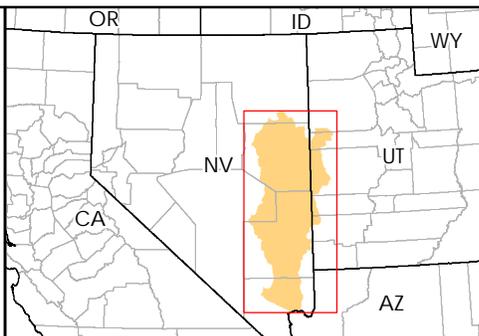
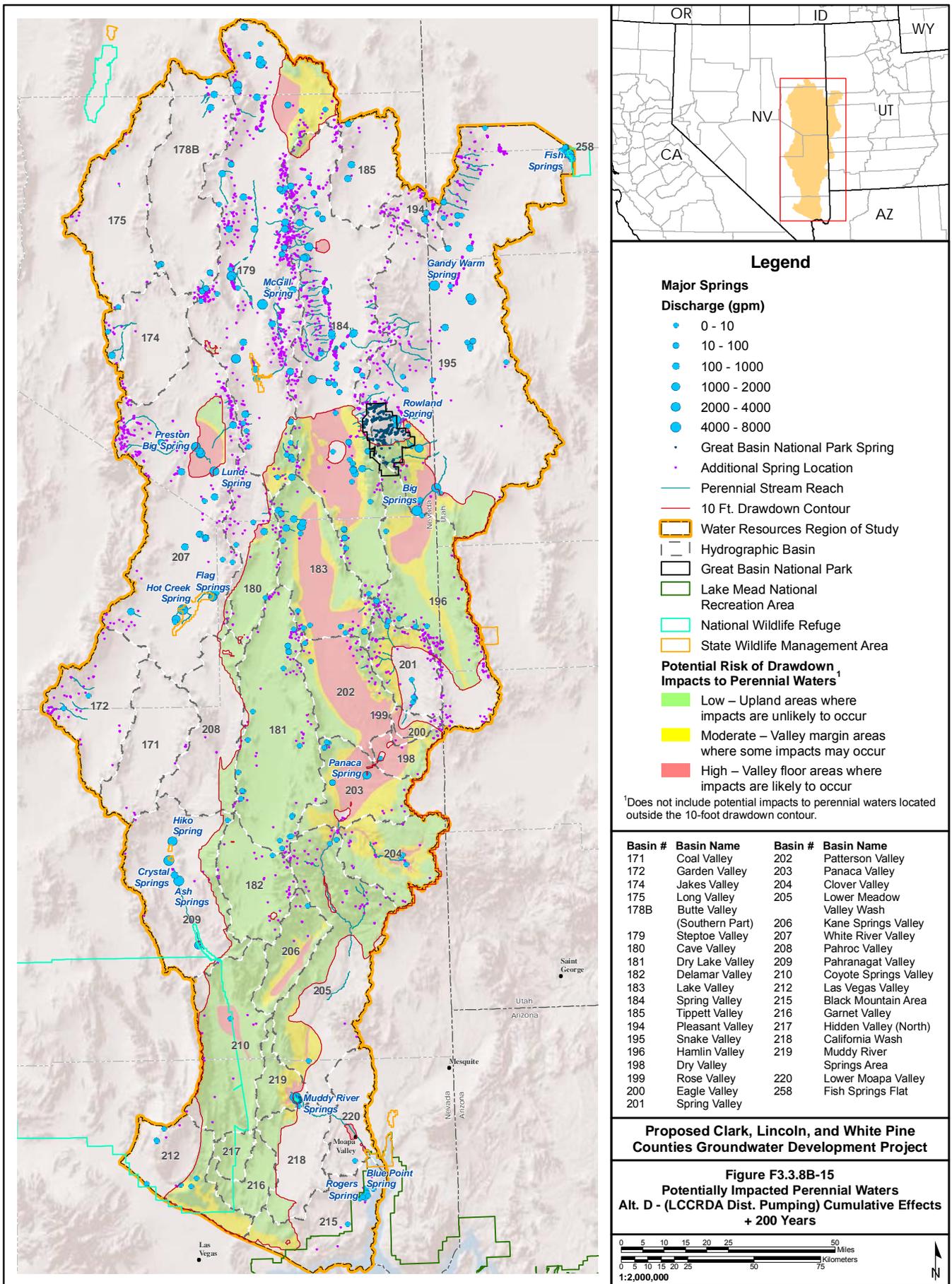
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	228	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-14**  
**Potentially Impacted Perennial Waters**  
**Alt. D - (LCCRDA Dist. Pumping) Cumulative Effects + 75 Years**



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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location
- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

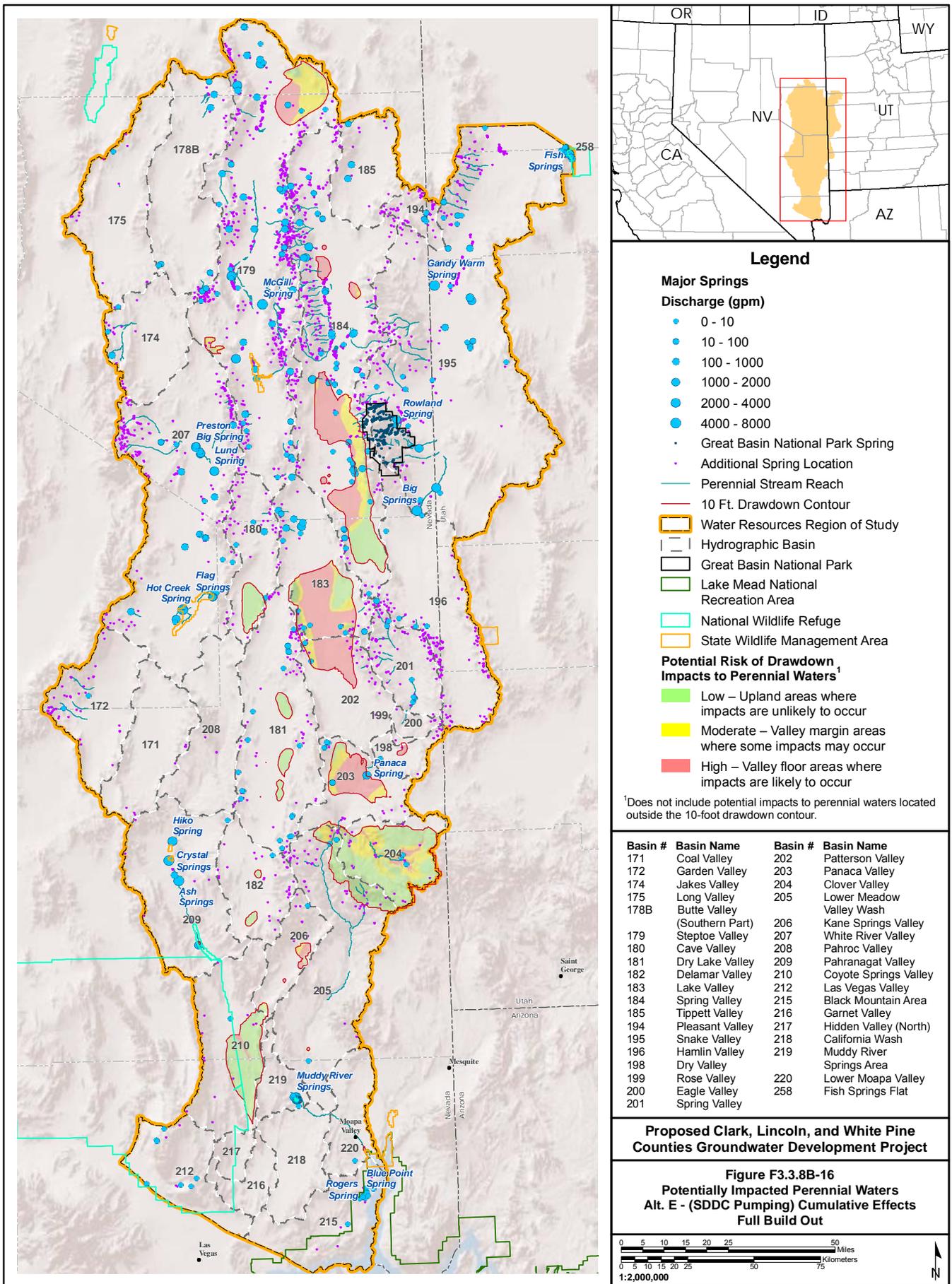
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

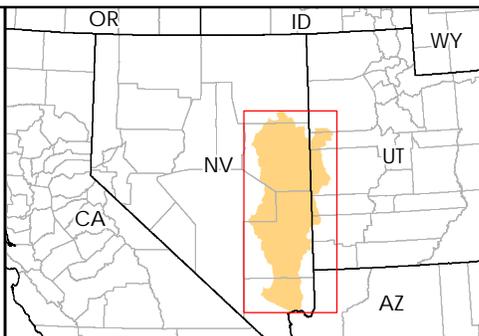
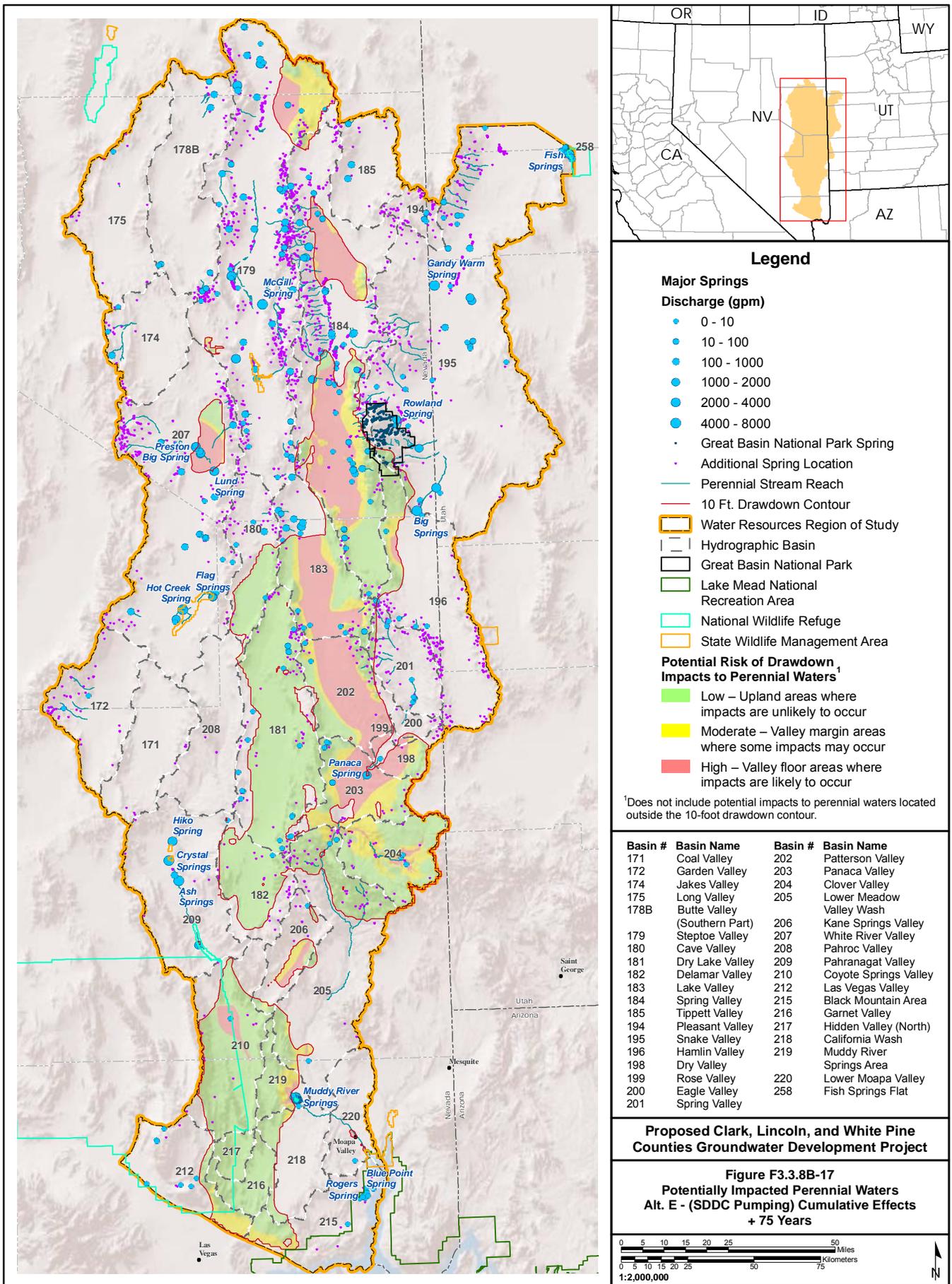
**Figure F3.3.8B-15**  
**Potentially Impacted Perennial Waters**  
**Alt. D - (LCCRDA Dist. Pumping) Cumulative Effects + 200 Years**



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.



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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

Perennial Stream Reach  
 10 Ft. Drawdown Contour  
 Water Resources Region of Study  
 Hydrographic Basin  
 Great Basin National Park  
 Lake Mead National Recreation Area  
 National Wildlife Refuge  
 State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

\*Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

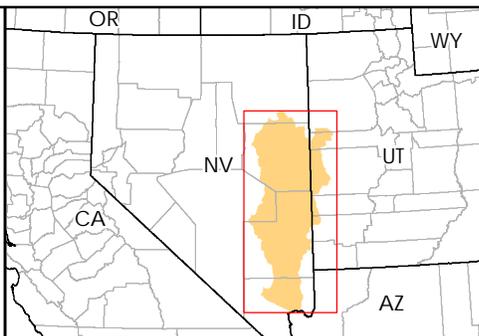
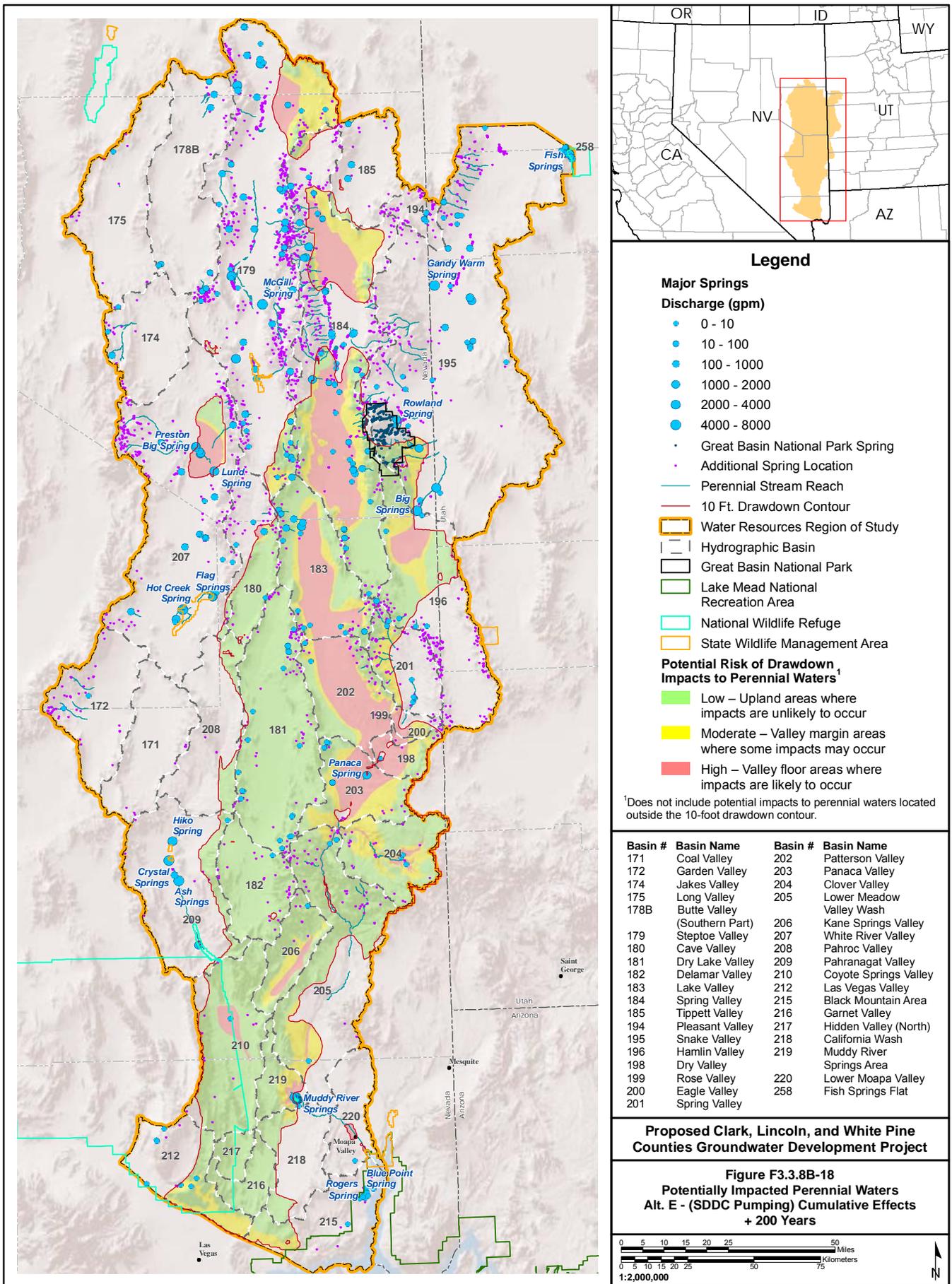
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahrnagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-17**  
**Potentially Impacted Perennial Waters**  
**Alt. E - (SDDC Pumping) Cumulative Effects**  
**+ 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 Kilometers  
 1:2,000,000

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.



### Legend

**Major Springs Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location
- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- Water Resources Region of Study
- Hydrographic Basin
- Great Basin National Park
- Lake Mead National Recreation Area
- National Wildlife Refuge
- State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- Low – Upland areas where impacts are unlikely to occur
- Moderate – Valley margin areas where some impacts may occur
- High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

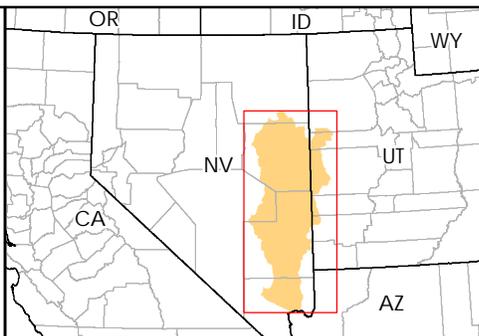
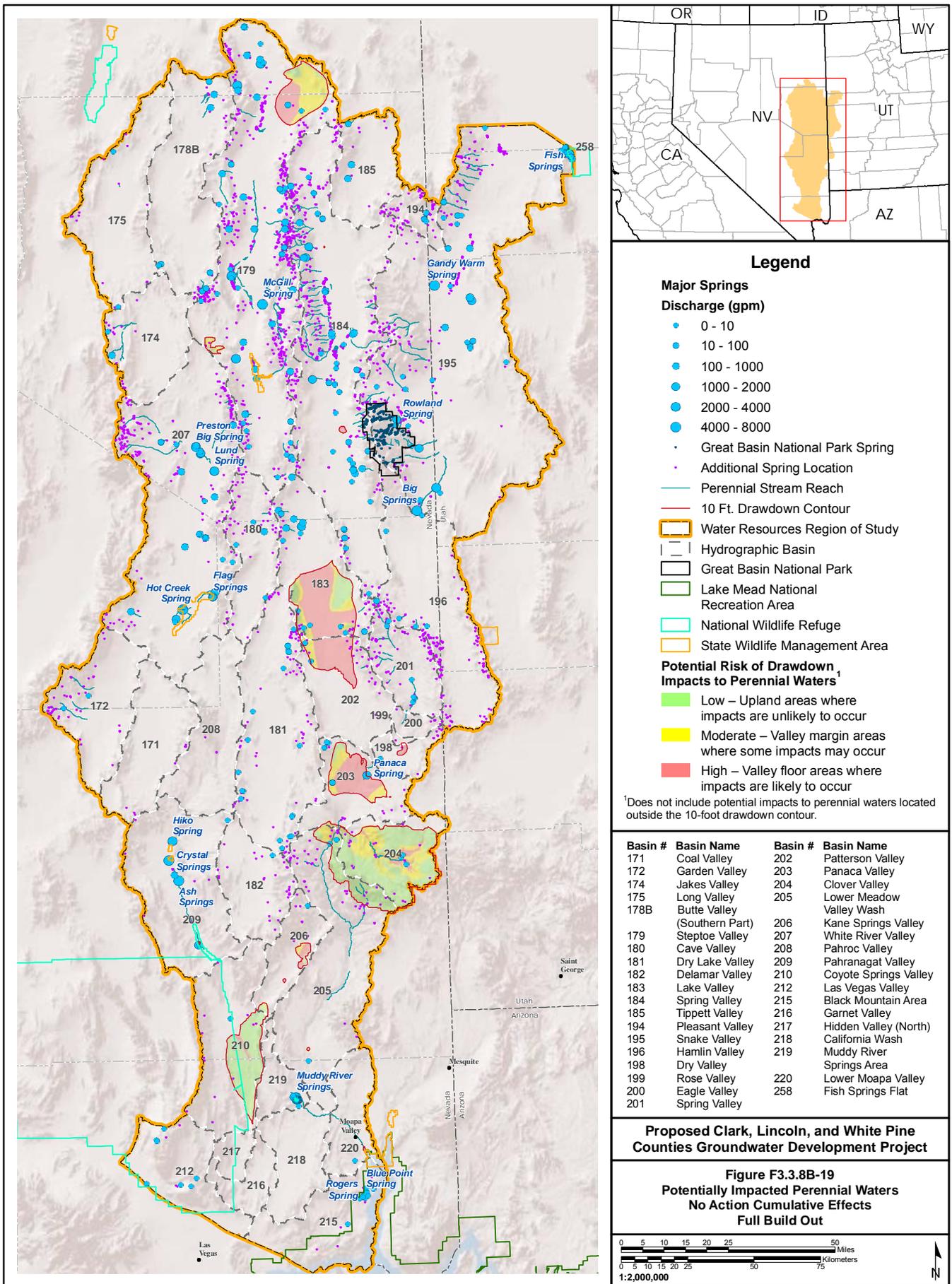
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-18**  
**Potentially Impacted Perennial Waters**  
**Alt. E - (SDDC Pumping) Cumulative Effects**  
**+ 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
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- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
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194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

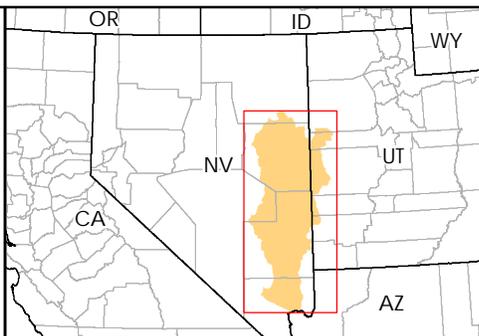
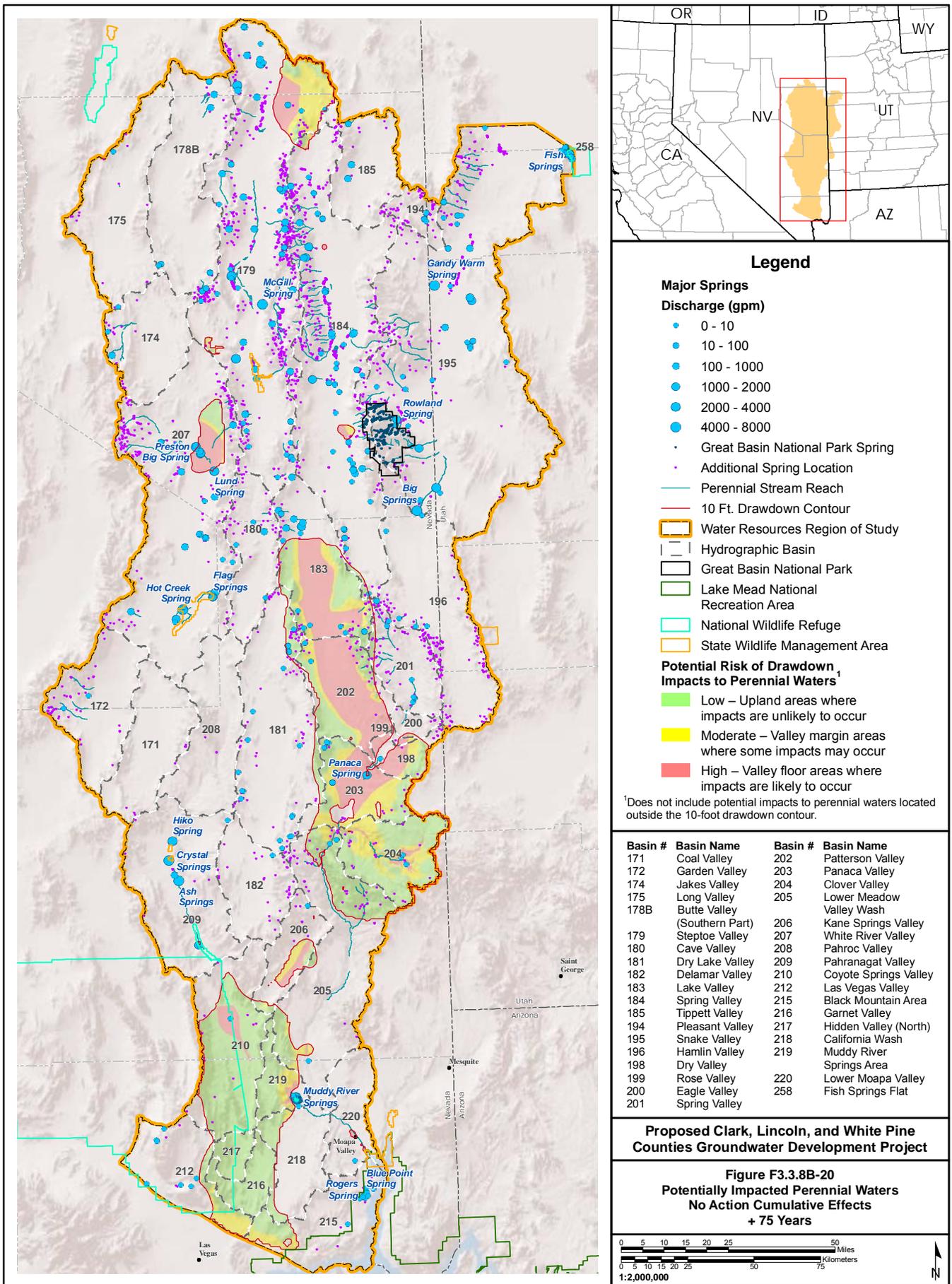
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-19**  
**Potentially Impacted Perennial Waters**  
**No Action Cumulative Effects**  
**Full Build Out**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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.



### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000

- Great Basin National Park Spring
- Additional Spring Location

- Perennial Stream Reach
- 10 Ft. Drawdown Contour
- ▭ Water Resources Region of Study
- ▭ Hydrographic Basin
- ▭ Great Basin National Park
- ▭ Lake Mead National Recreation Area
- ▭ National Wildlife Refuge
- ▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

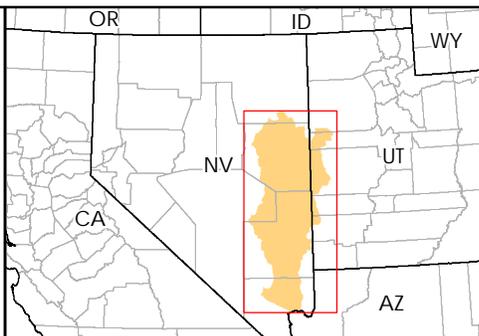
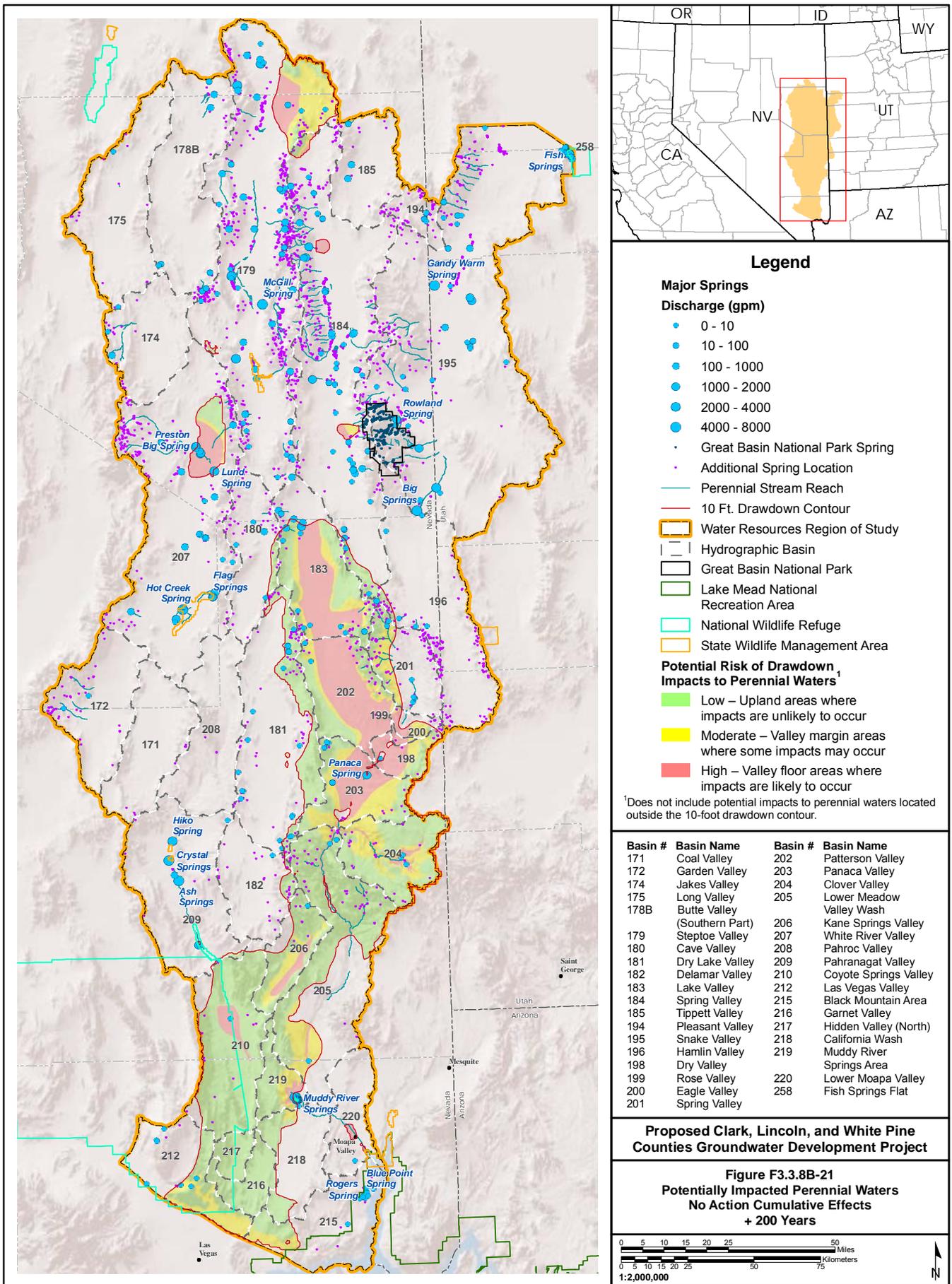
**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-20**  
**Potentially Impacted Perennial Waters**  
**No Action Cumulative Effects**  
**+ 75 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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### Legend

**Major Springs**

**Discharge (gpm)**

- 0 - 10
- 10 - 100
- 100 - 1000
- 1000 - 2000
- 2000 - 4000
- 4000 - 8000
- Great Basin National Park Spring
- Additional Spring Location

— Perennial Stream Reach

— 10 Ft. Drawdown Contour

▭ Water Resources Region of Study

▭ Hydrographic Basin

▭ Great Basin National Park

▭ Lake Mead National Recreation Area

▭ National Wildlife Refuge

▭ State Wildlife Management Area

**Potential Risk of Drawdown Impacts to Perennial Waters<sup>1</sup>**

- ▭ Low – Upland areas where impacts are unlikely to occur
- ▭ Moderate – Valley margin areas where some impacts may occur
- ▭ High – Valley floor areas where impacts are likely to occur

<sup>1</sup>Does not include potential impacts to perennial waters located outside the 10-foot drawdown contour.

Basin #	Basin Name	Basin #	Basin Name
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172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (North)
195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

**Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project**

**Figure F3.3.8B-21**  
**Potentially Impacted Perennial Waters**  
**No Action Cumulative Effects**  
**+ 200 Years**

0 5 10 15 20 25 50 Miles  
 0 5 10 15 20 25 50 75 Kilometers  
 1:2,000,000

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