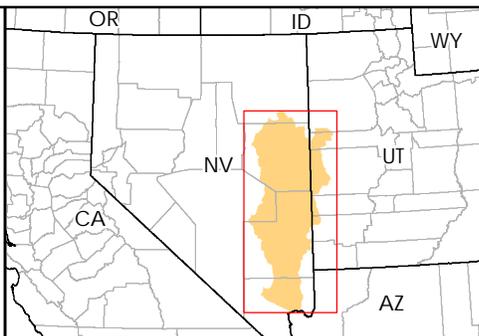
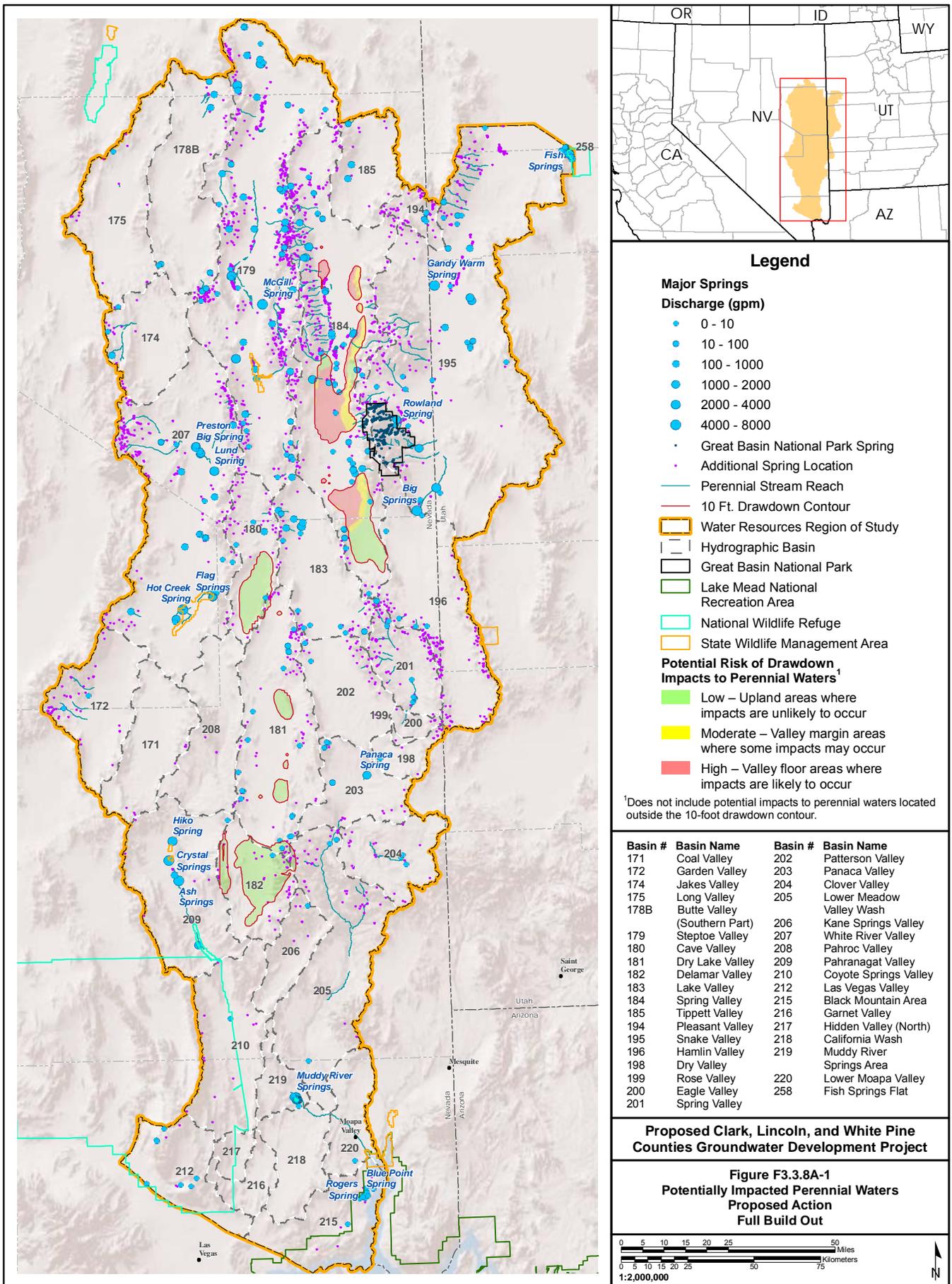


F3.3.8

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 Waters¹

- 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

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

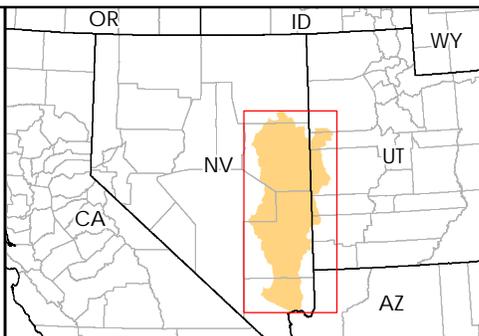
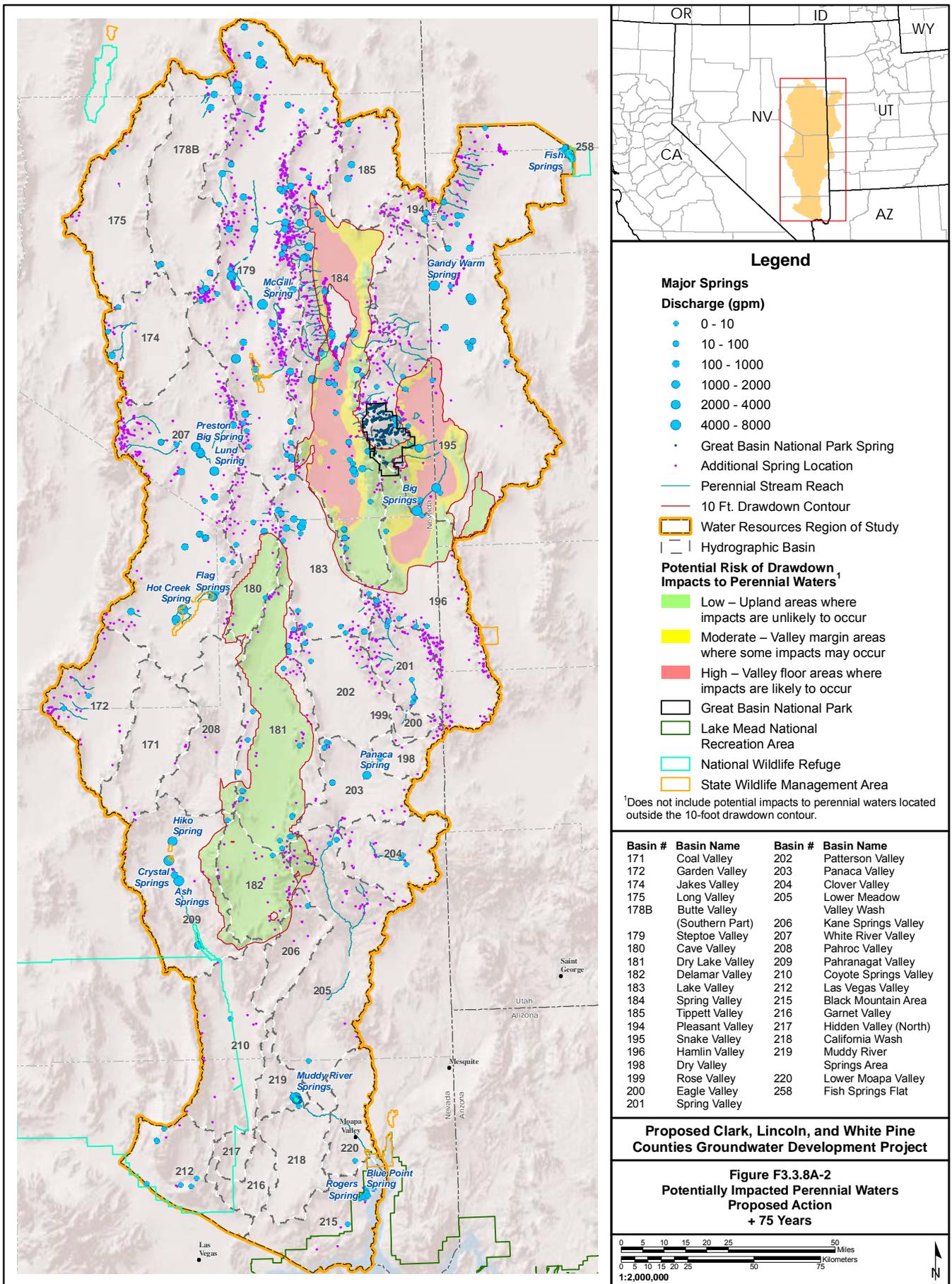
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	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-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 Waters¹

- 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

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

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

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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		

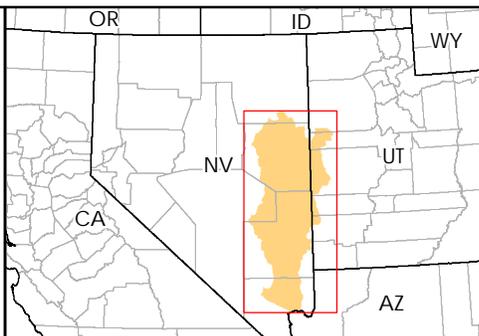
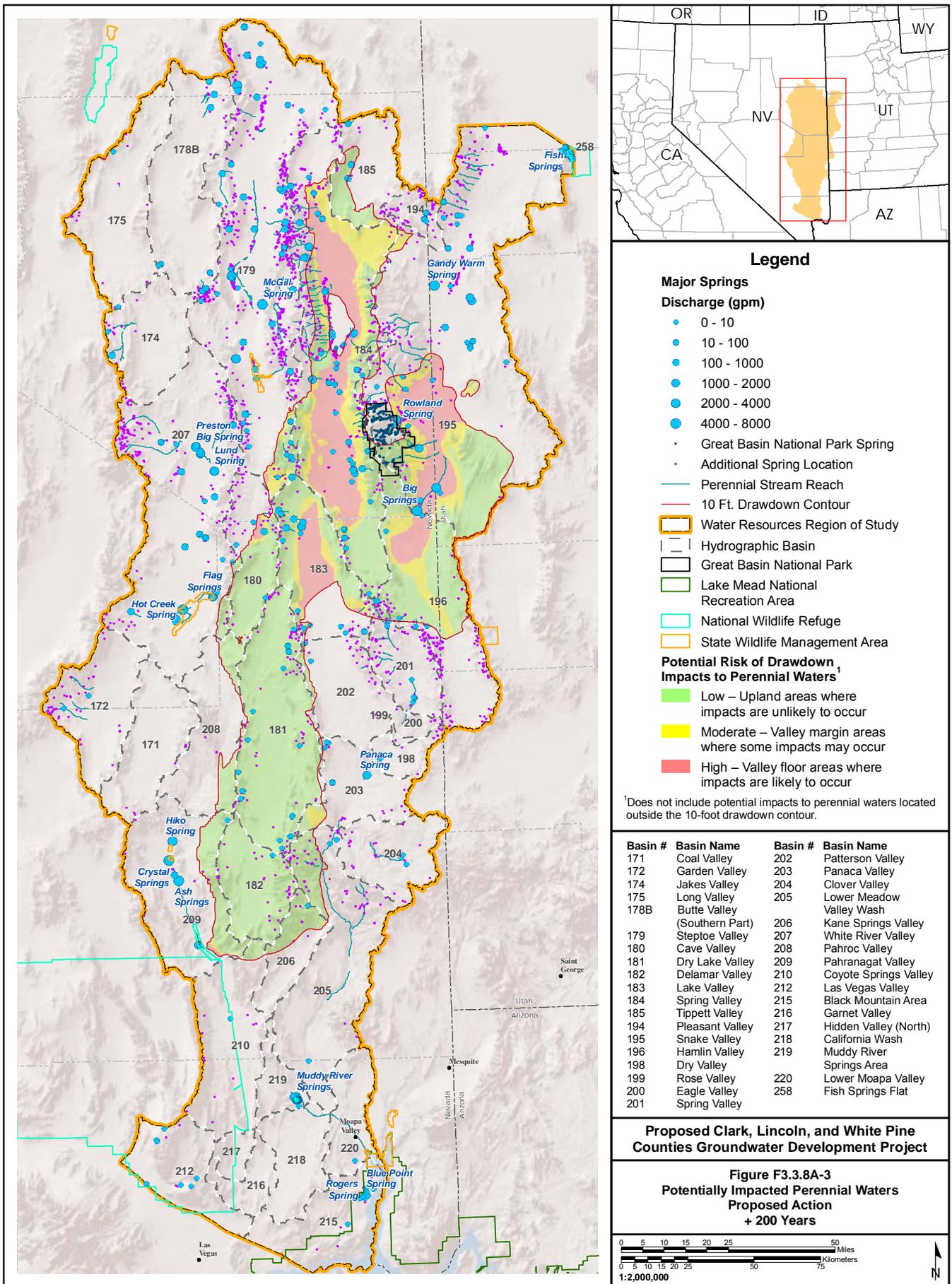
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

Figure F3.3.8A-2
Potentially Impacted Perennial Waters
Proposed Action + 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 Waters¹

- 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

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

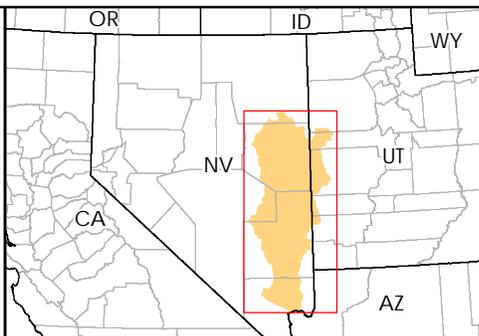
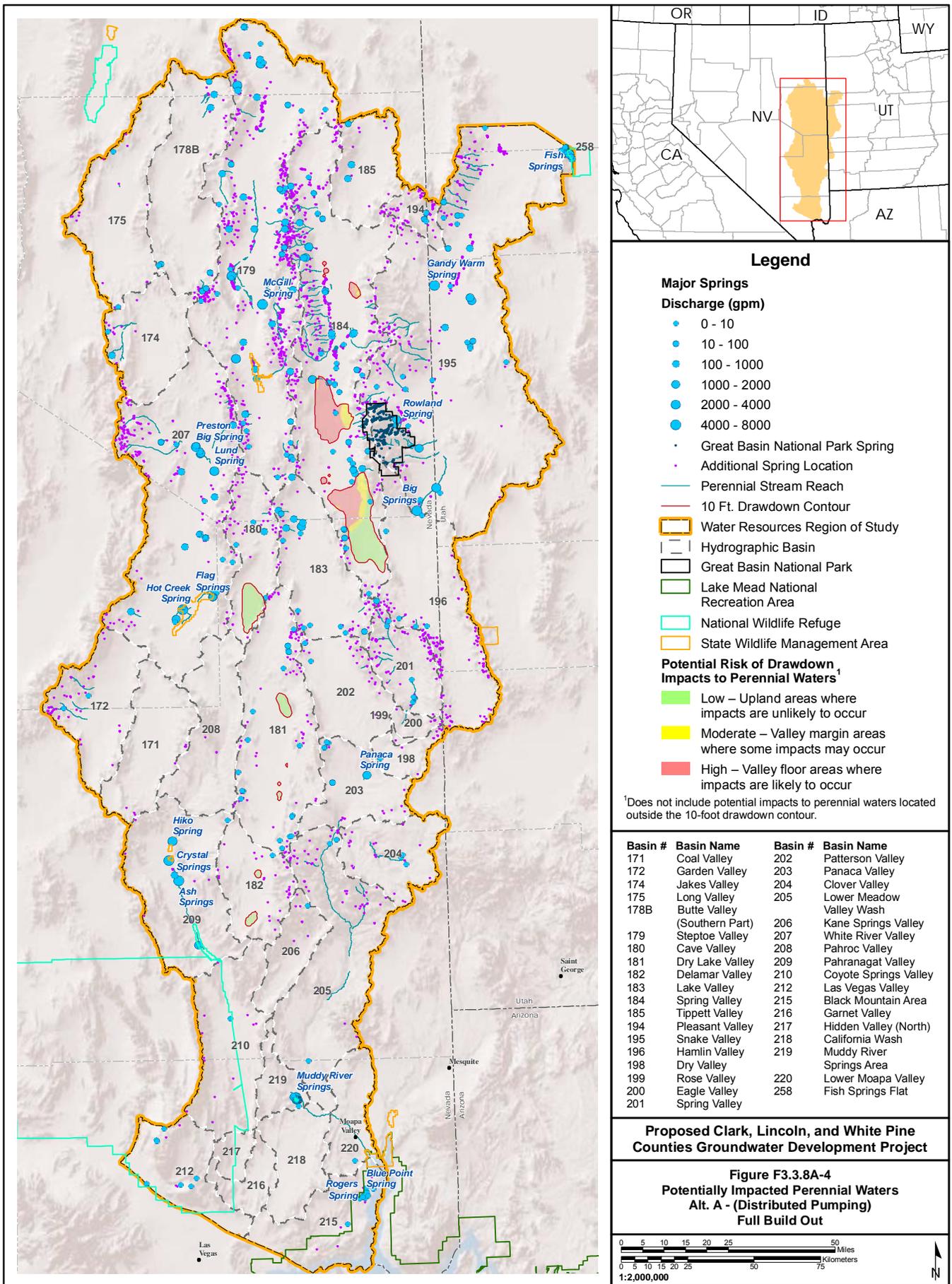
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	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 Waters¹

- ▭ 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

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

Basin #	Basin Name	Basin #	Basin Name
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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		

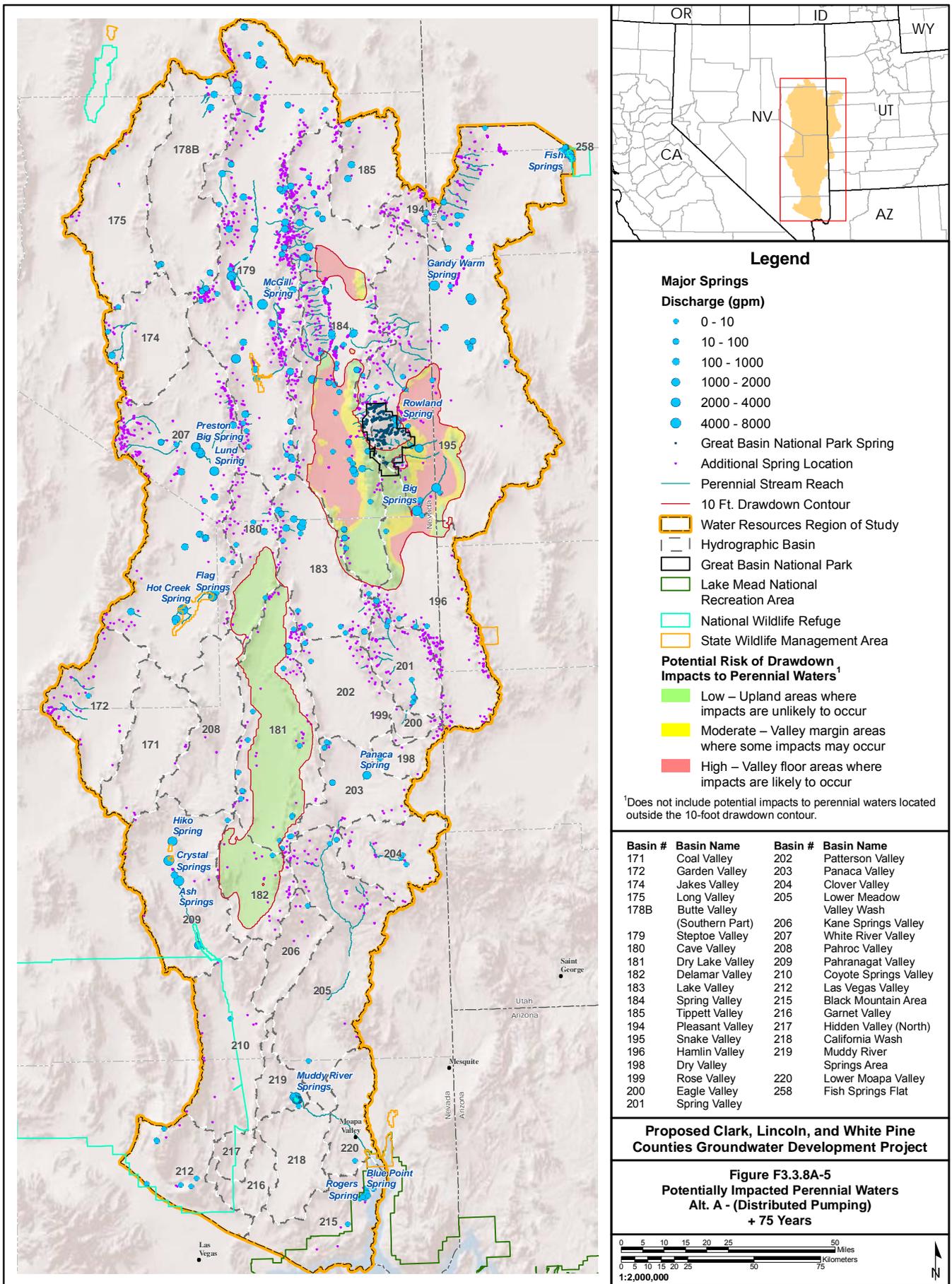
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

Figure F3.3.8A-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 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 Waters¹

- 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

¹Does 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
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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	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

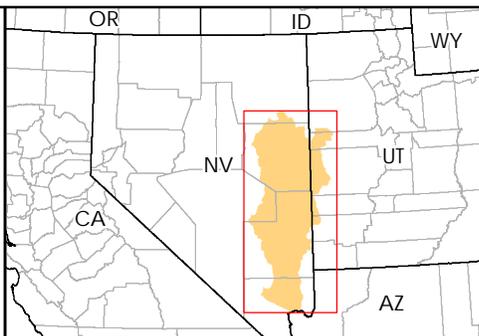
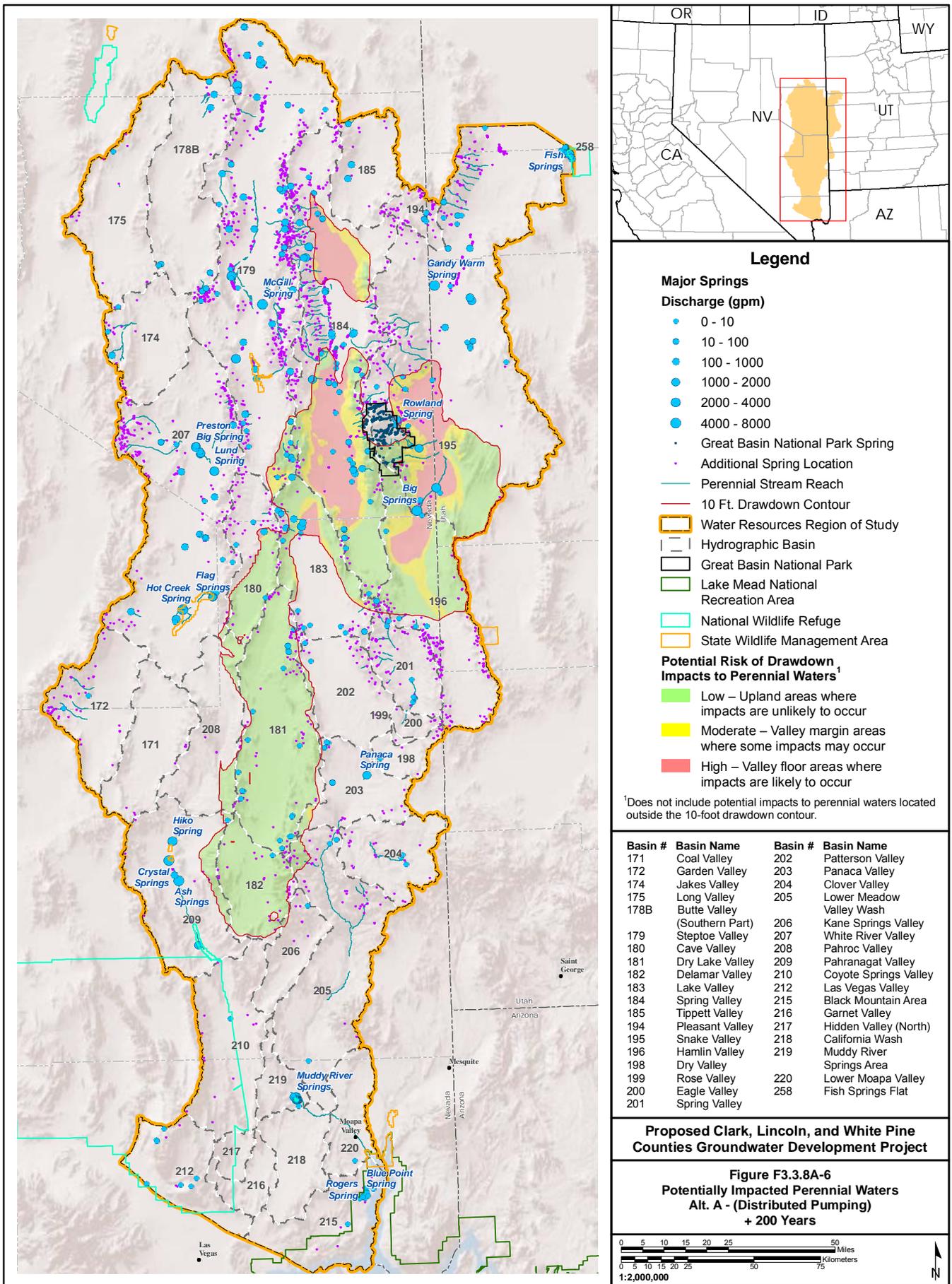
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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

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 Waters¹

- 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

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

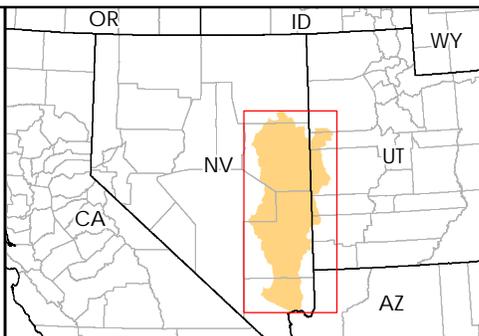
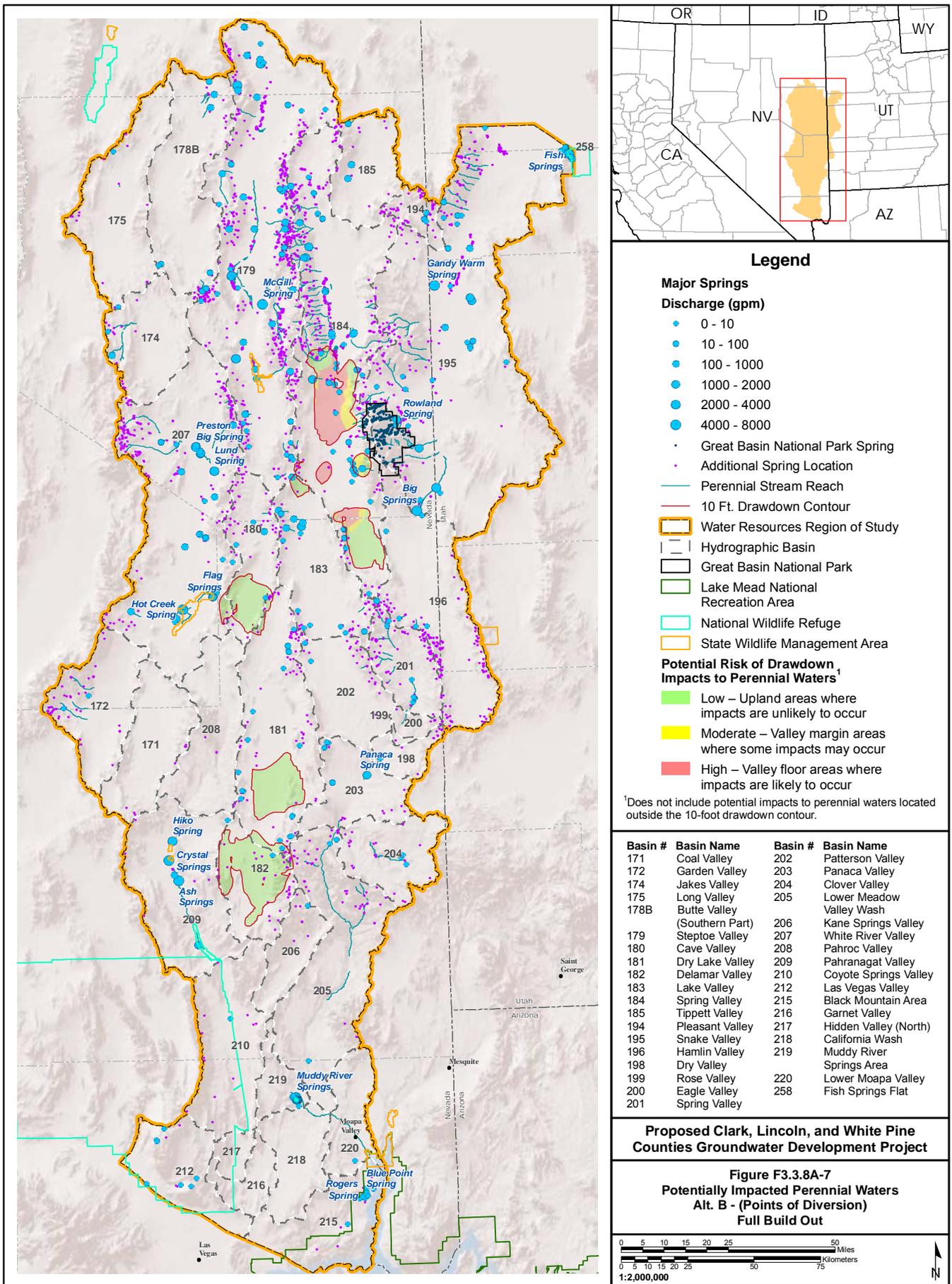
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	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	Garret 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-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 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 Waters¹

- ▭ 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

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

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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	Garrett 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		

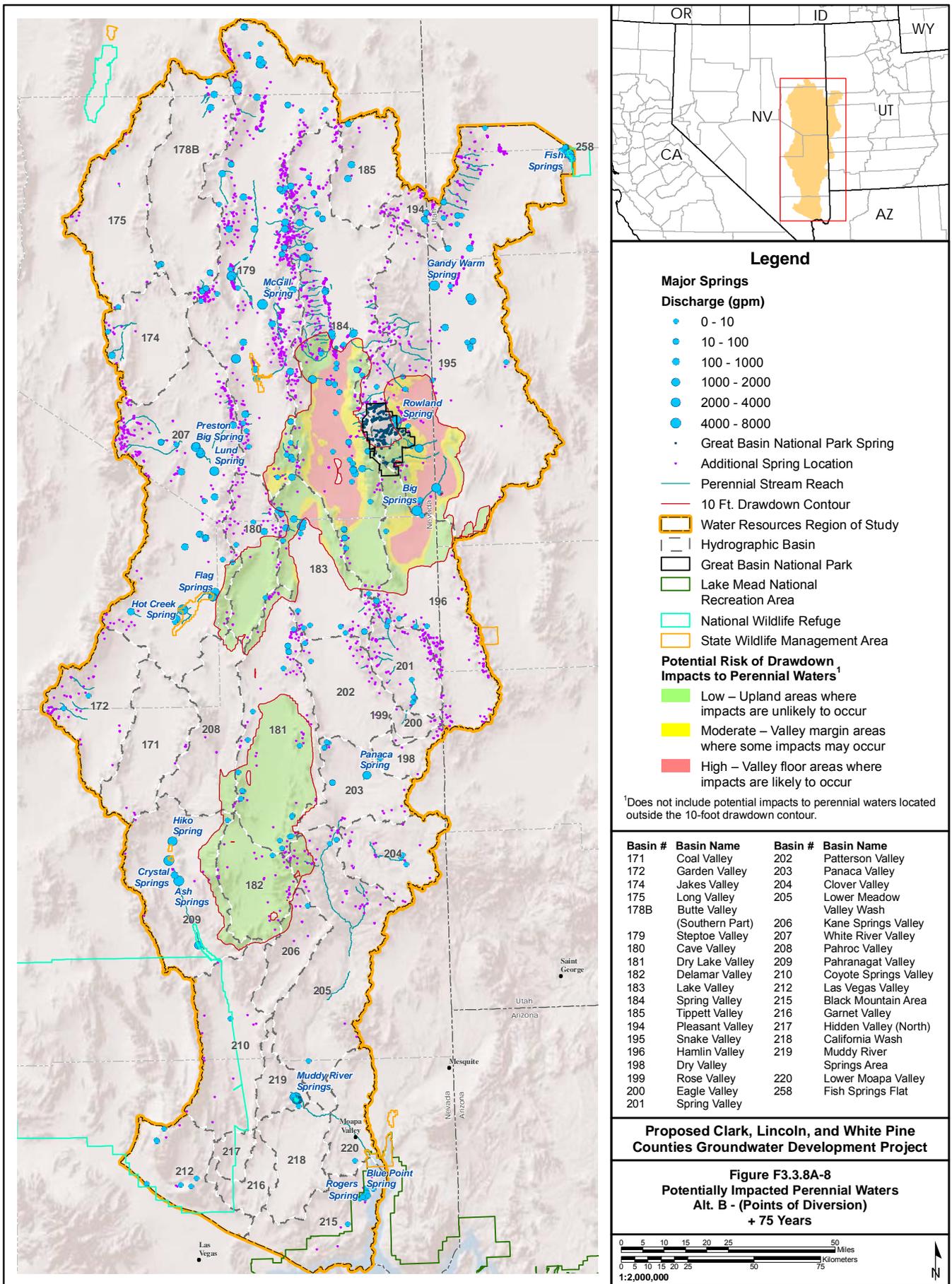
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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

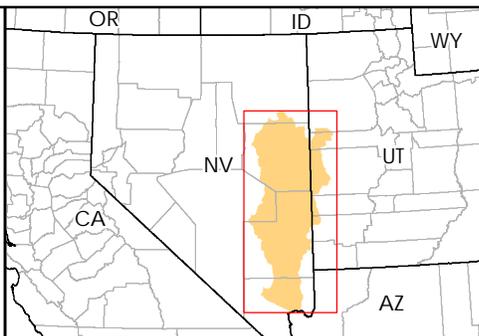
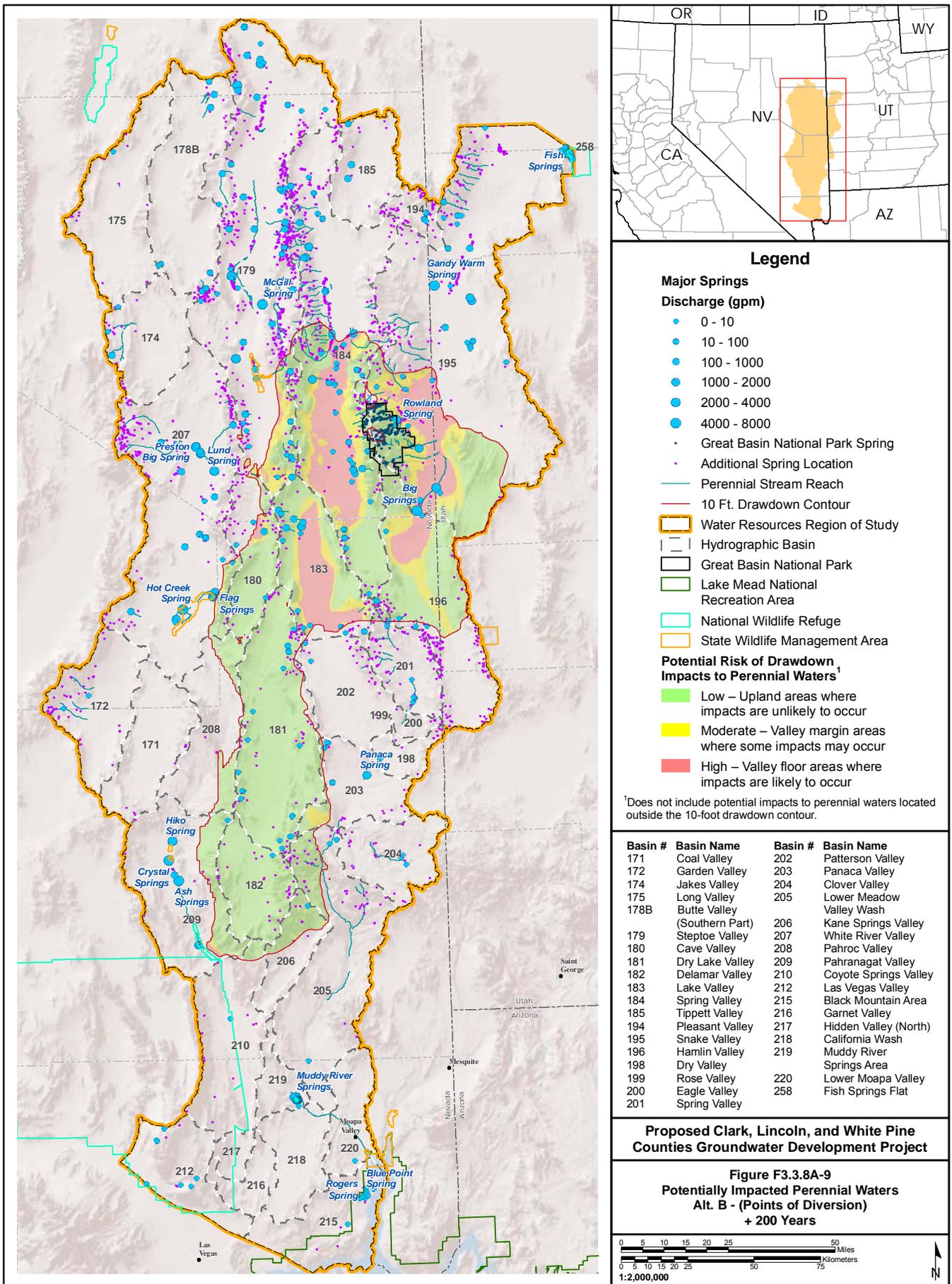
0 5 10 15 20 25 50 Miles
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

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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 Waters¹

- 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

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

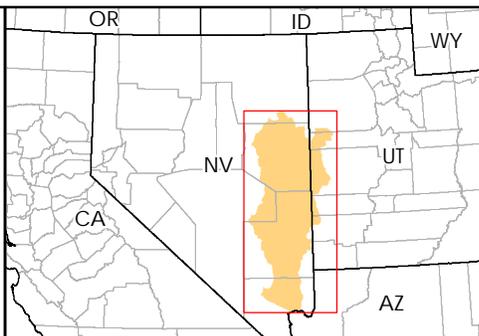
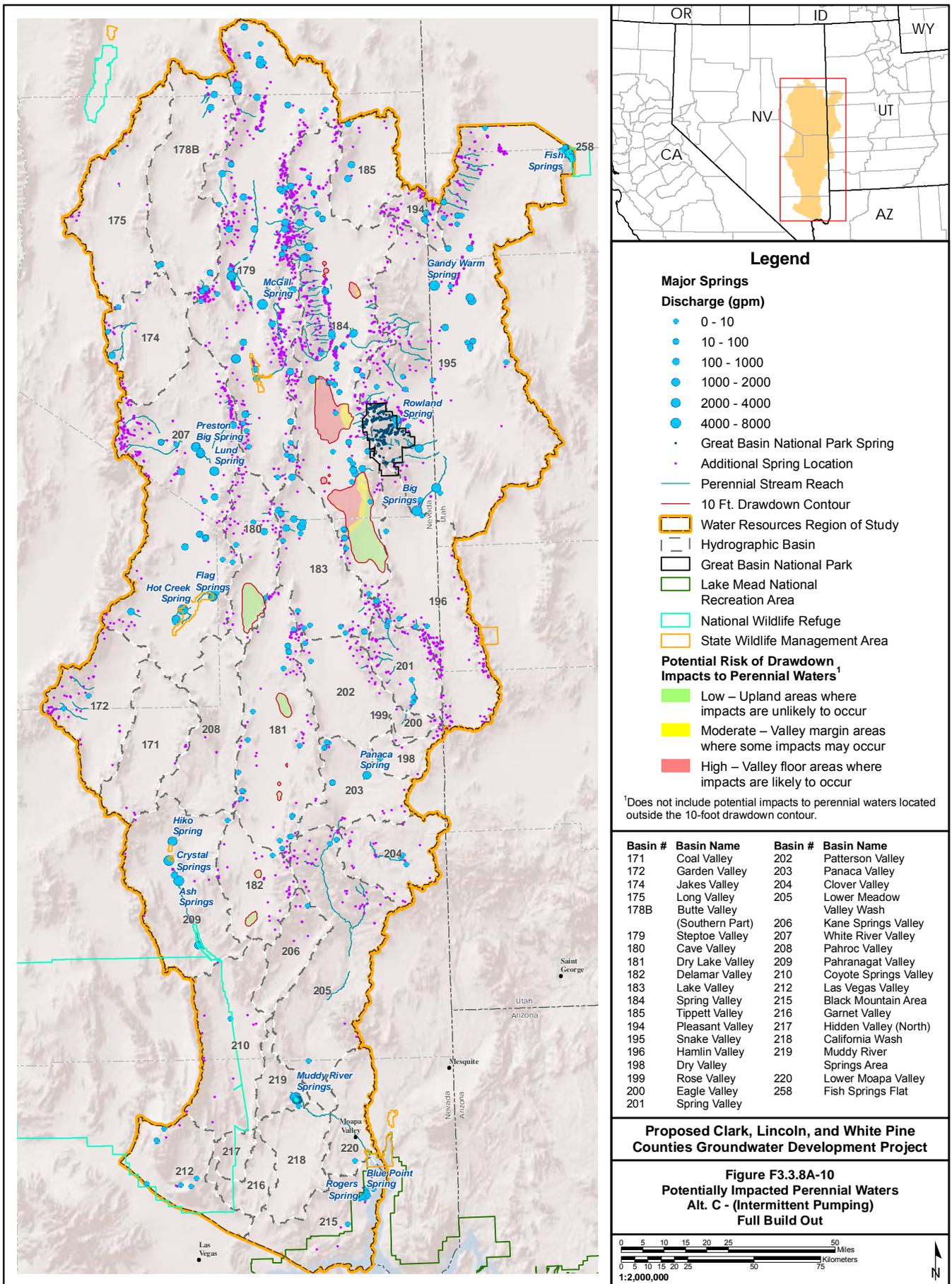
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182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett Valley	216	Garnet Valley
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196	Hamlin Valley	219	Muddy River 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-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 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 Waters¹

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

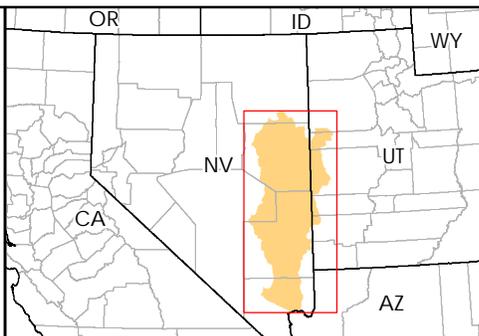
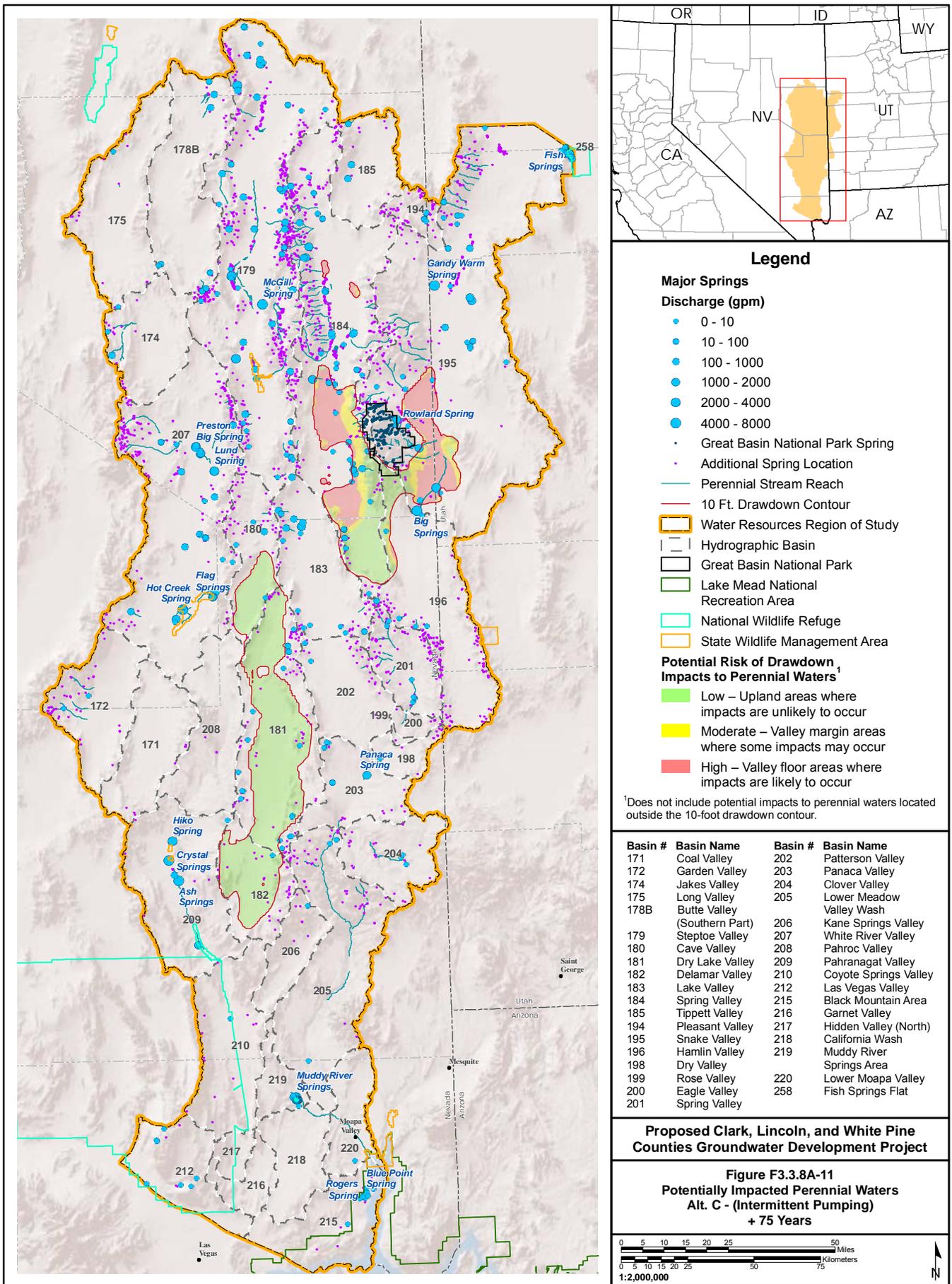
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

Figure F3.3.8A-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 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

- 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.

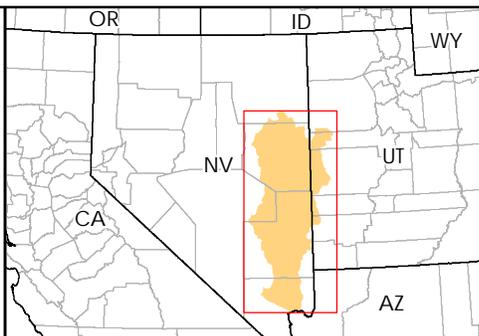
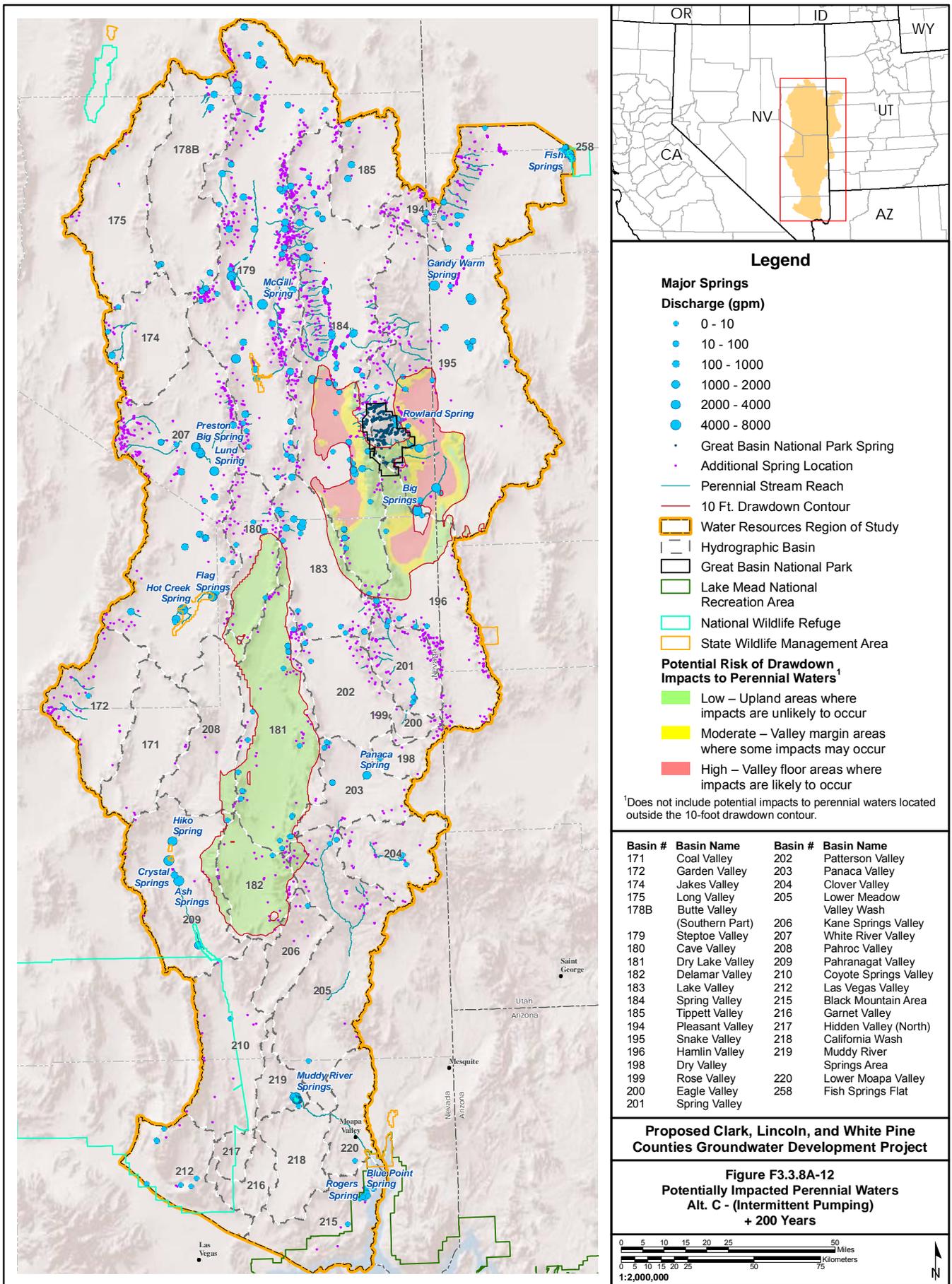
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
184	Spring Valley	215	Black Mountain Area
185	Tippett 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-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 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 Waters¹

- 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

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

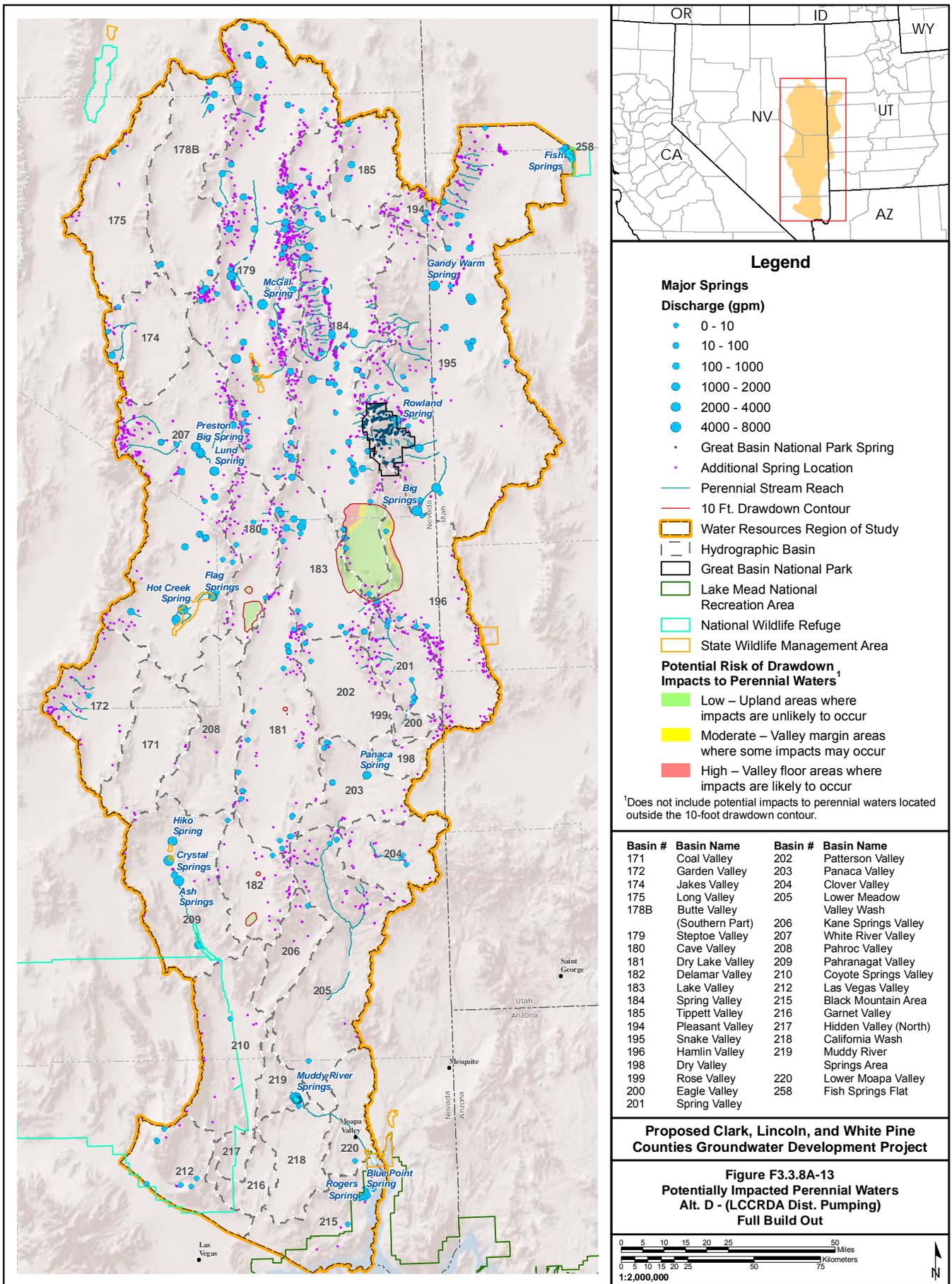
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	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-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 Waters¹

- ▭ 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

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

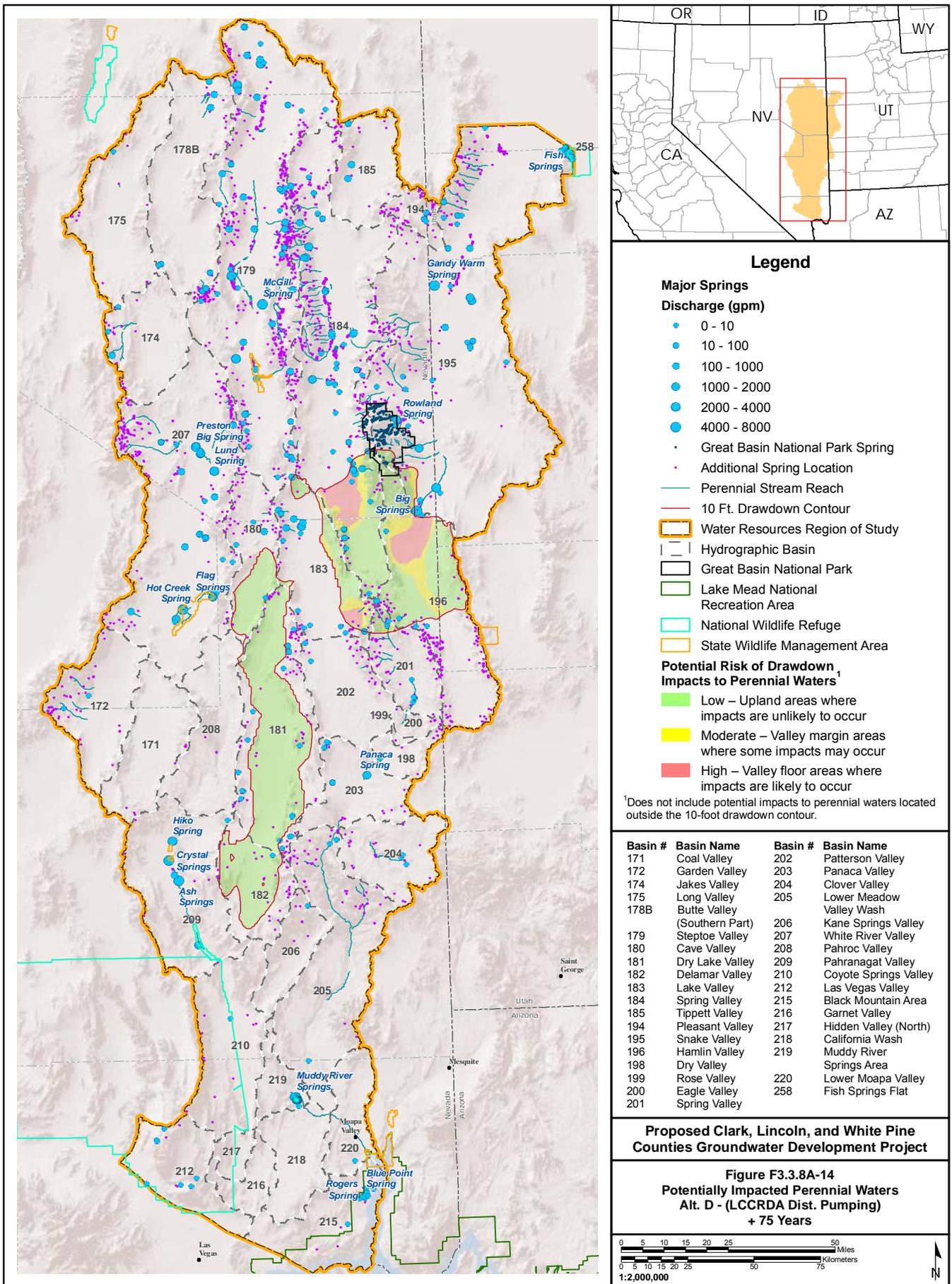
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171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
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

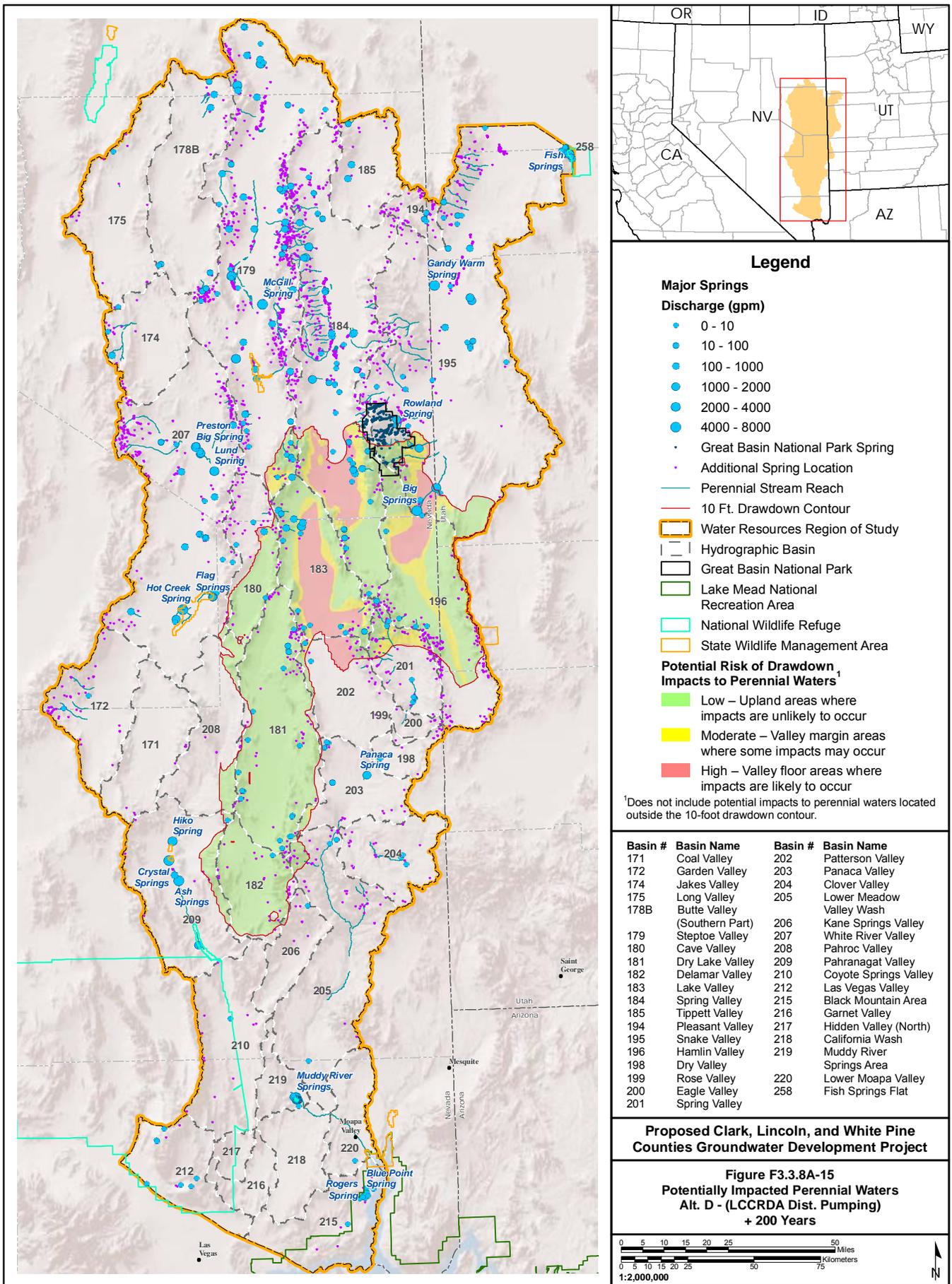
Figure F3.3.8A-13
Potentially Impacted Perennial Waters
Alt. D - (LCCRDA Dist. Pumping)
Full Build Out



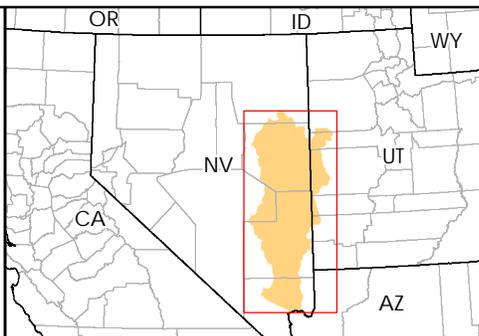
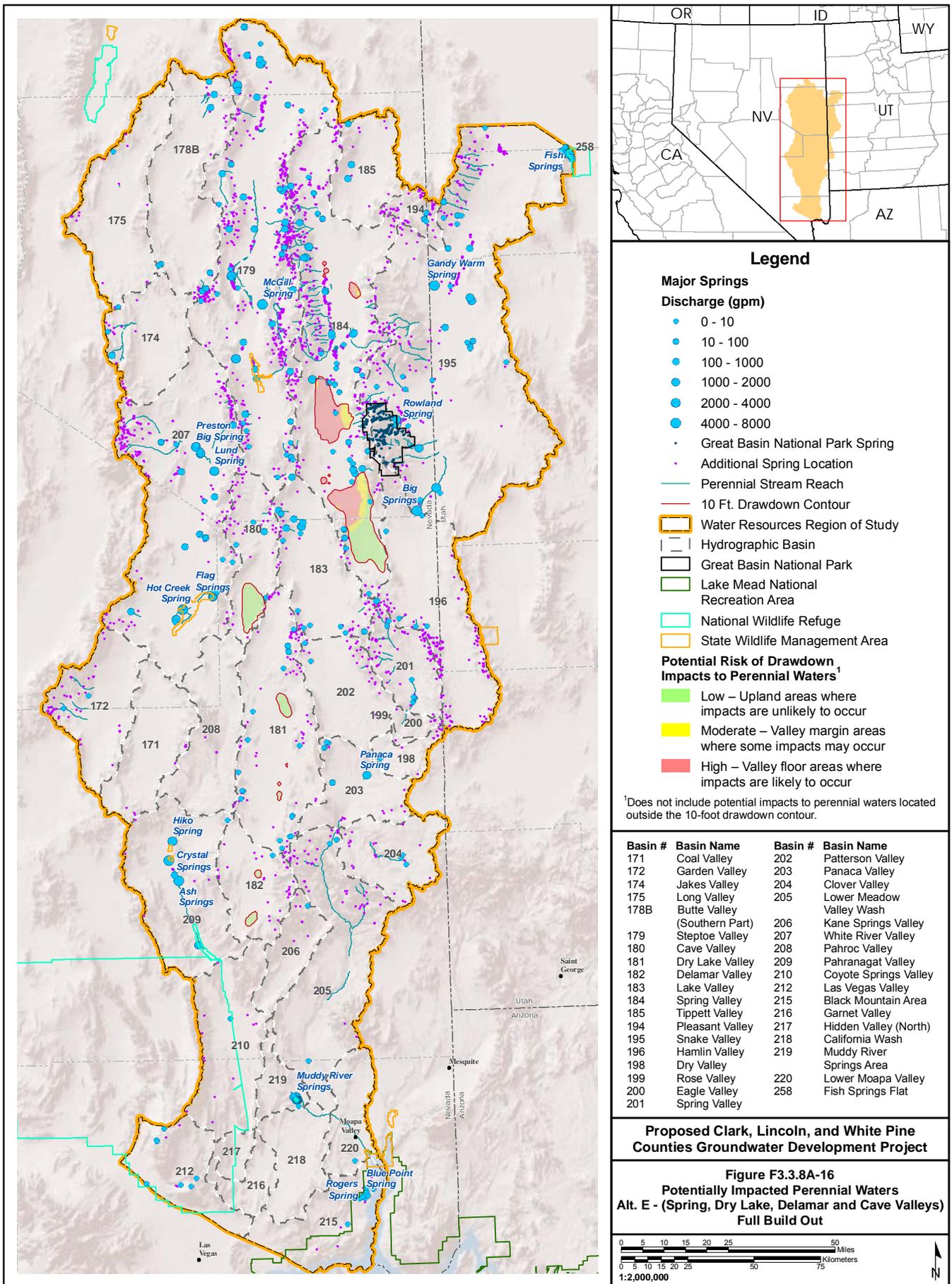
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Legend

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 Waters¹

- 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

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

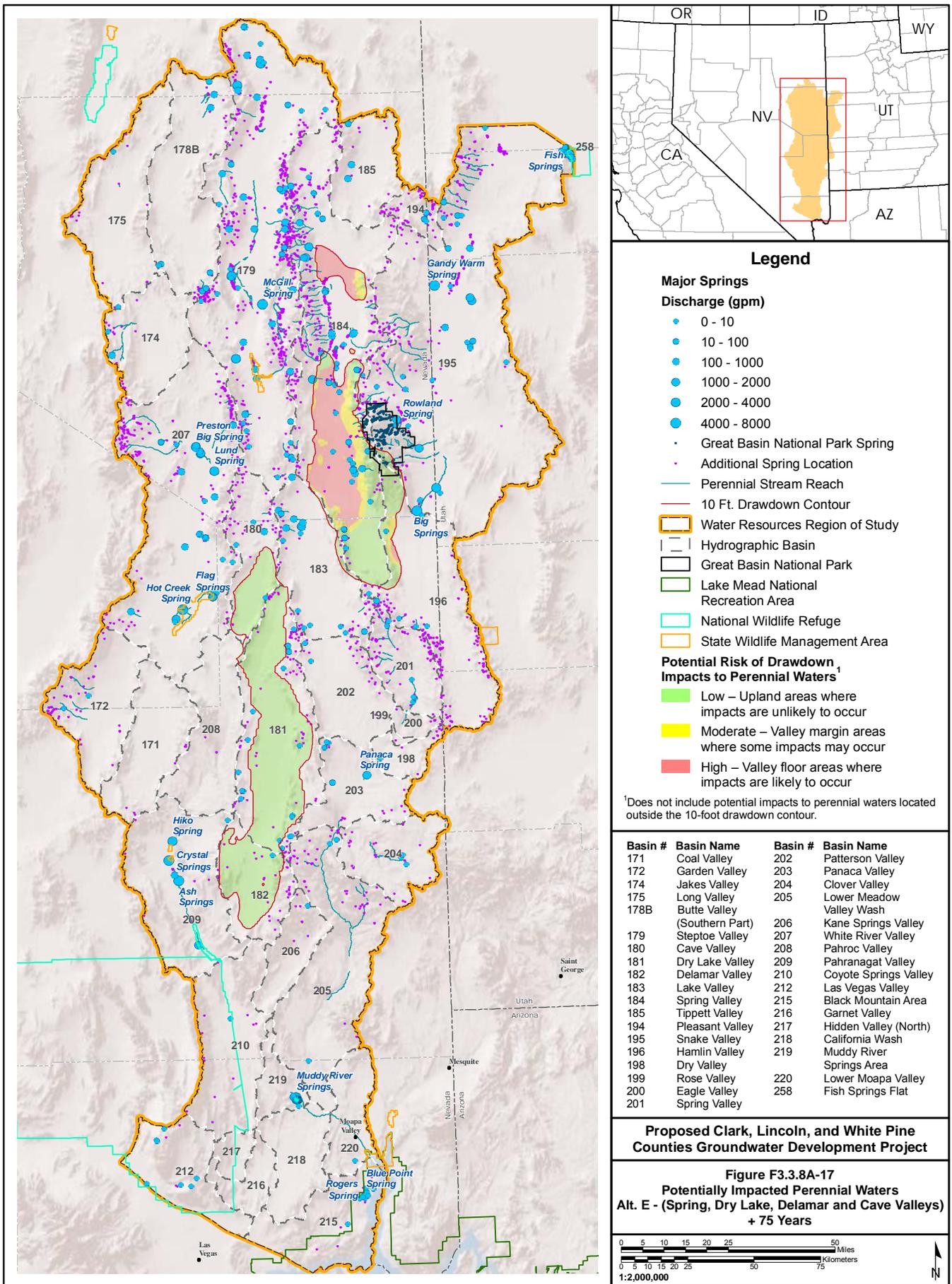
Basin #	Basin Name	Basin #	Basin Name
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172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
178B	Butte Valley (Southern Part)	206	Kane Springs Valley
179	Steptoe Valley	207	White River Valley
180	Cave Valley	208	Pahroc Valley
181	Dry Lake Valley	209	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	Garret 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-16
Potentially Impacted Perennial Waters
Alt. E - (Spring, Dry Lake, Delamar and Cave Valleys)
Full Build Out



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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

- ▭ 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
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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	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

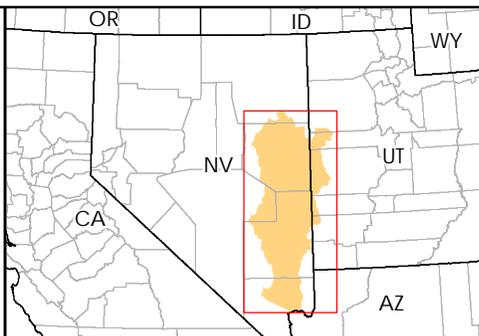
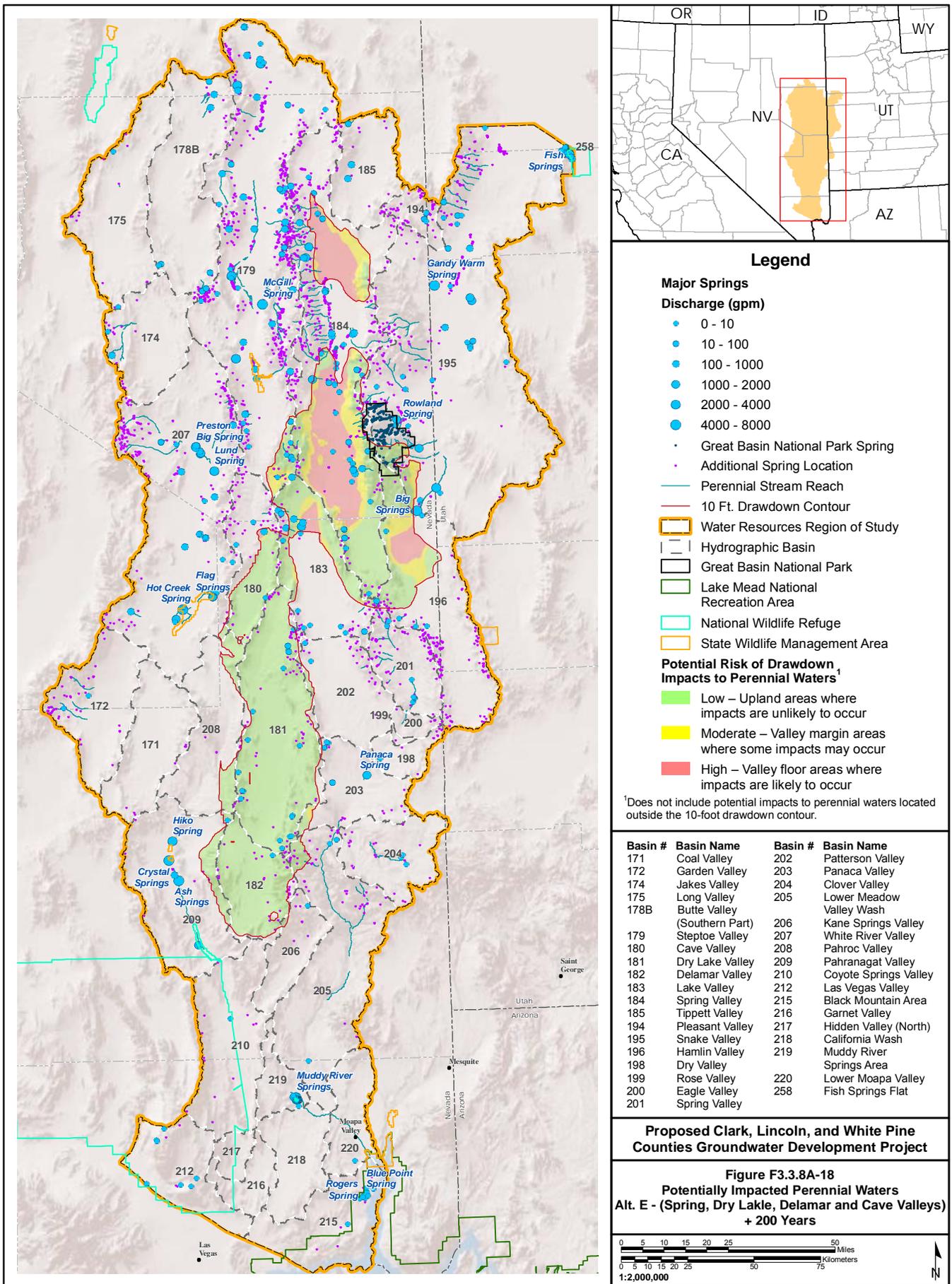
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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

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 Waters¹

- 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

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

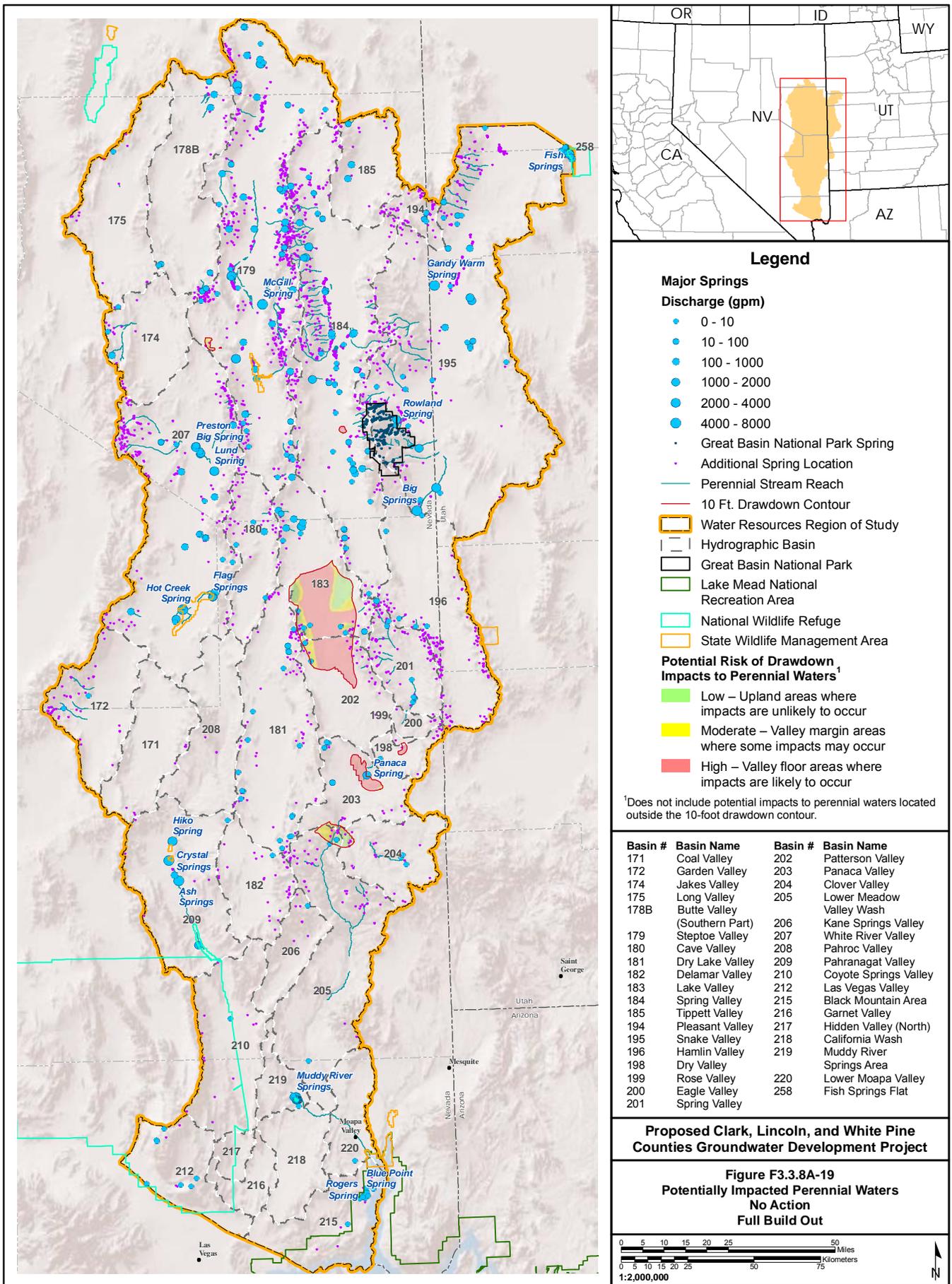
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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179	Steptoe Valley	207	White River Valley
180	Cave Valley	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

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 Waters¹

- ▭ 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

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

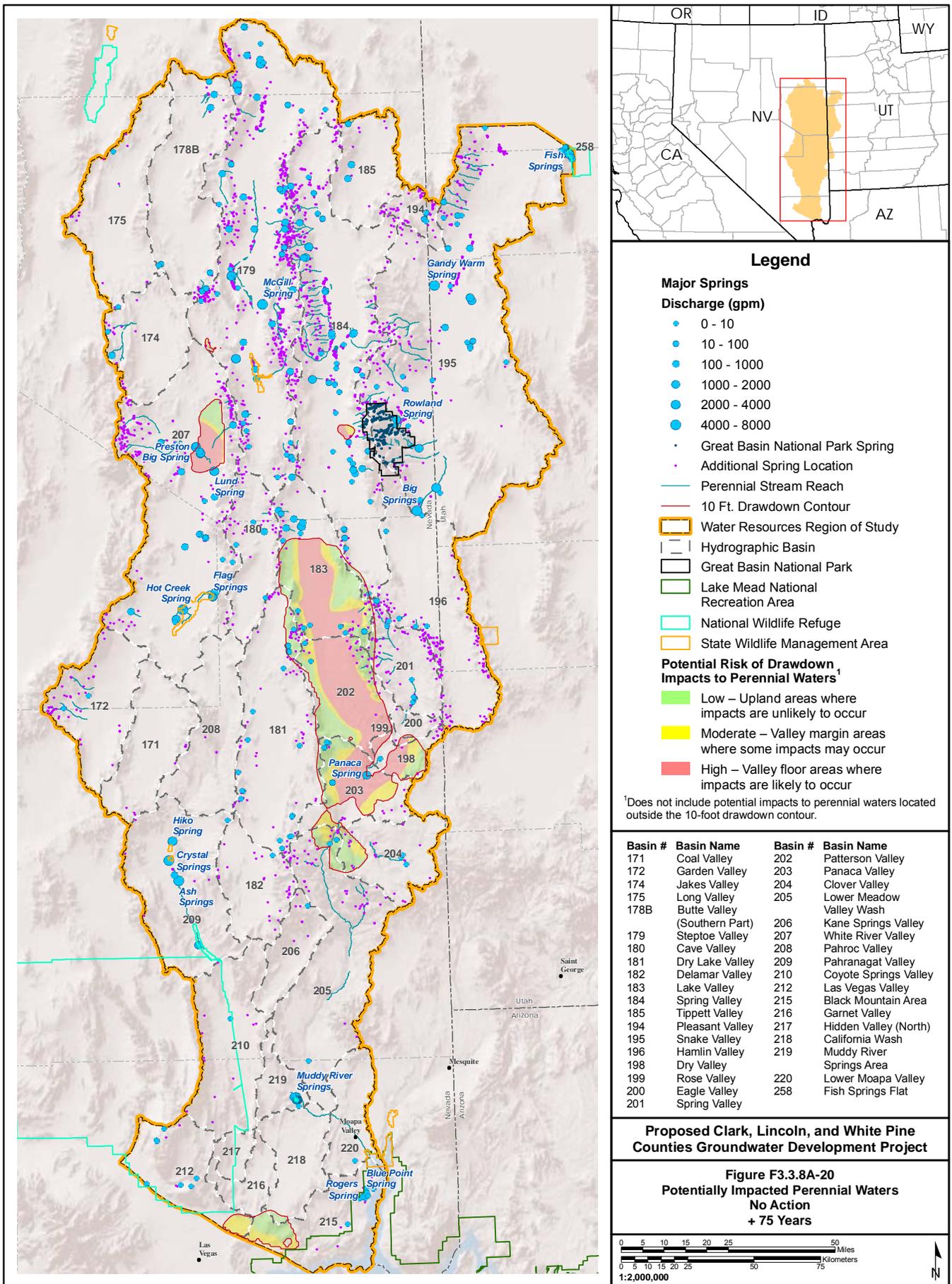
Basin #	Basin Name	Basin #	Basin Name
171	Coal Valley	202	Patterson Valley
172	Garden Valley	203	Panaca Valley
174	Jakes Valley	204	Clover Valley
175	Long Valley	205	Lower Meadow Valley Wash
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195	Snake Valley	218	California Wash
196	Hamlin Valley	219	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

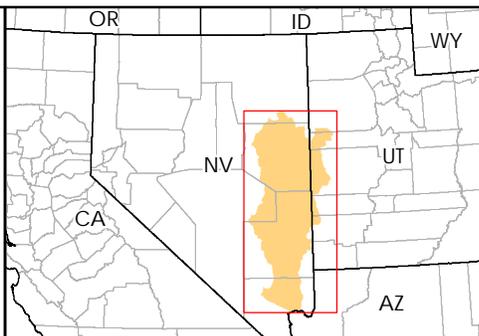
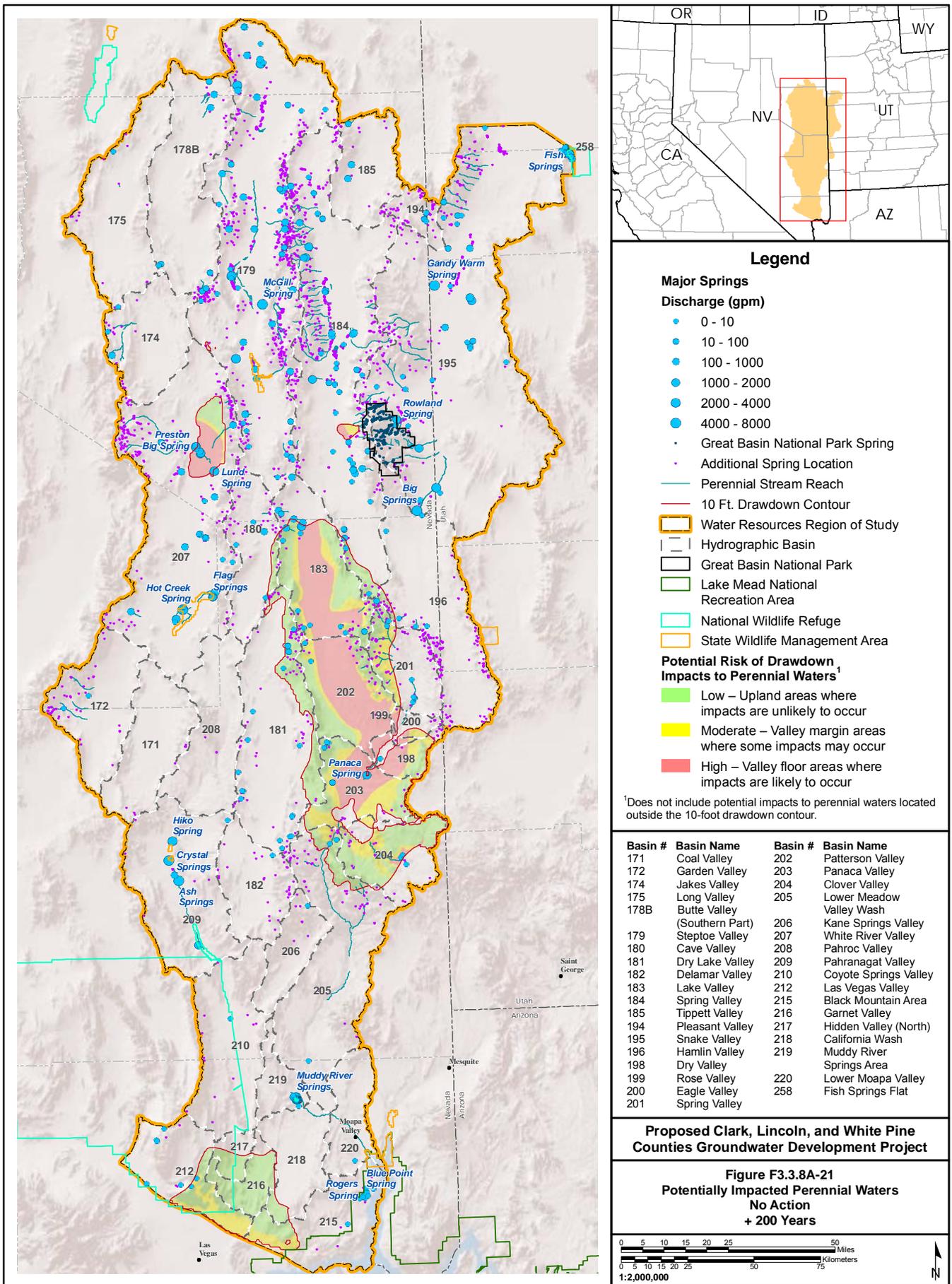
Figure F3.3.8A-19
Potentially Impacted Perennial Waters
No Action
Full Build Out

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 Waters¹

- 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

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

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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	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

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

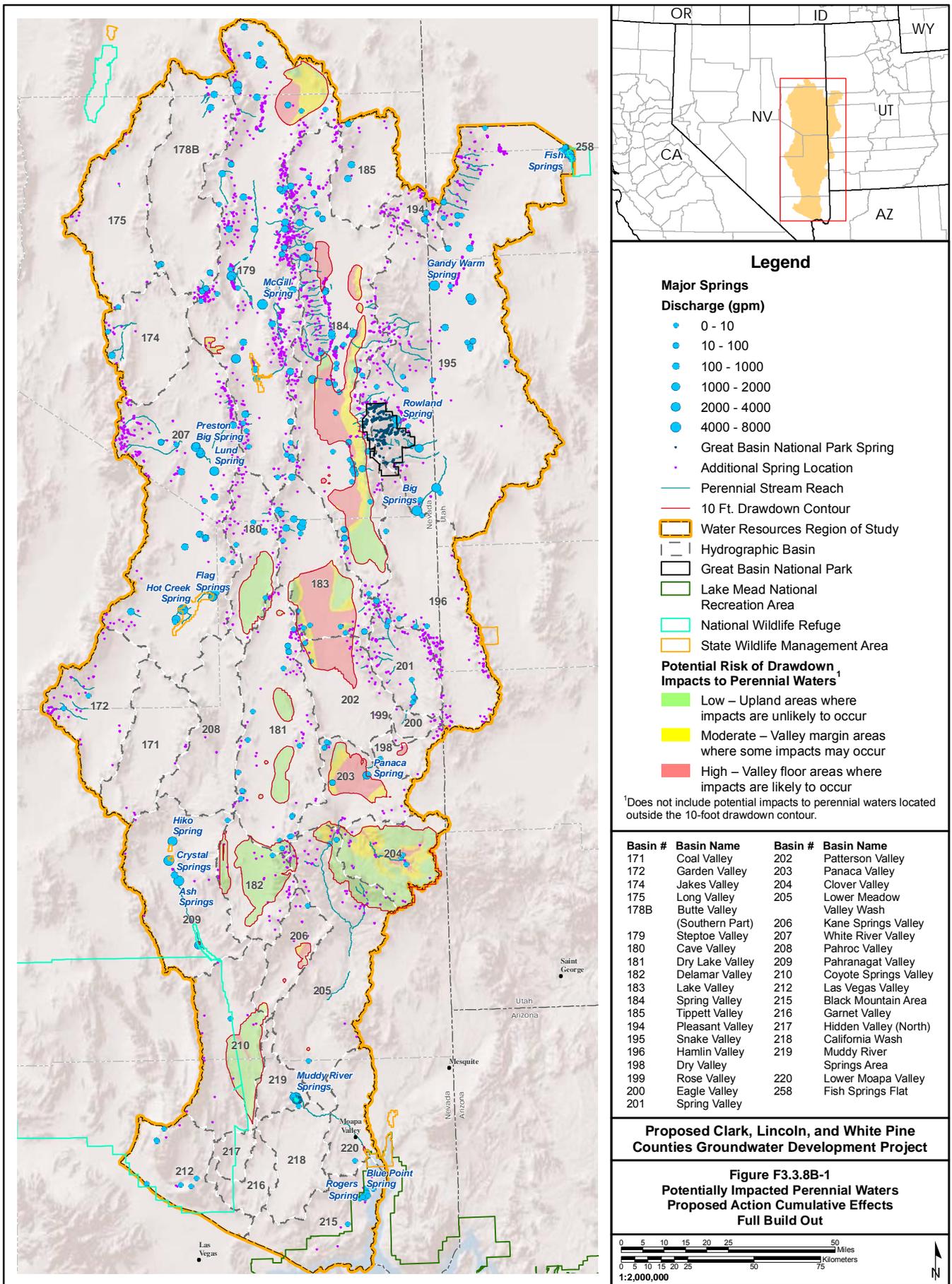
Figure F3.3.8A-21
Potentially Impacted Perennial Waters
No Action + 200 Years

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

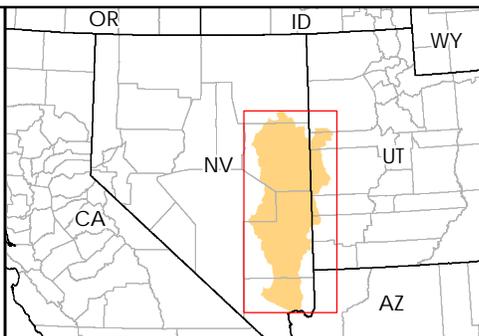
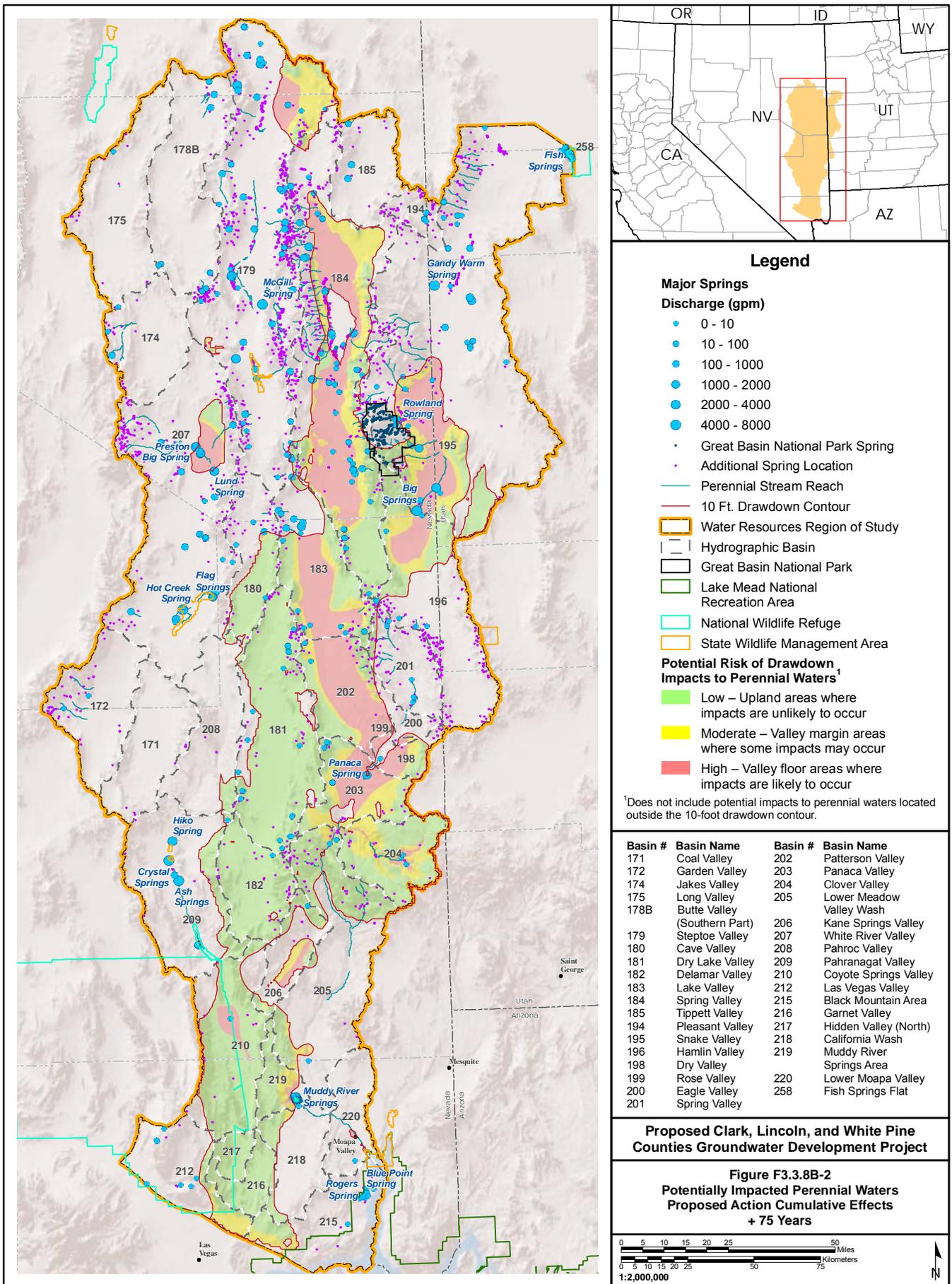
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N

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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 Waters¹

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

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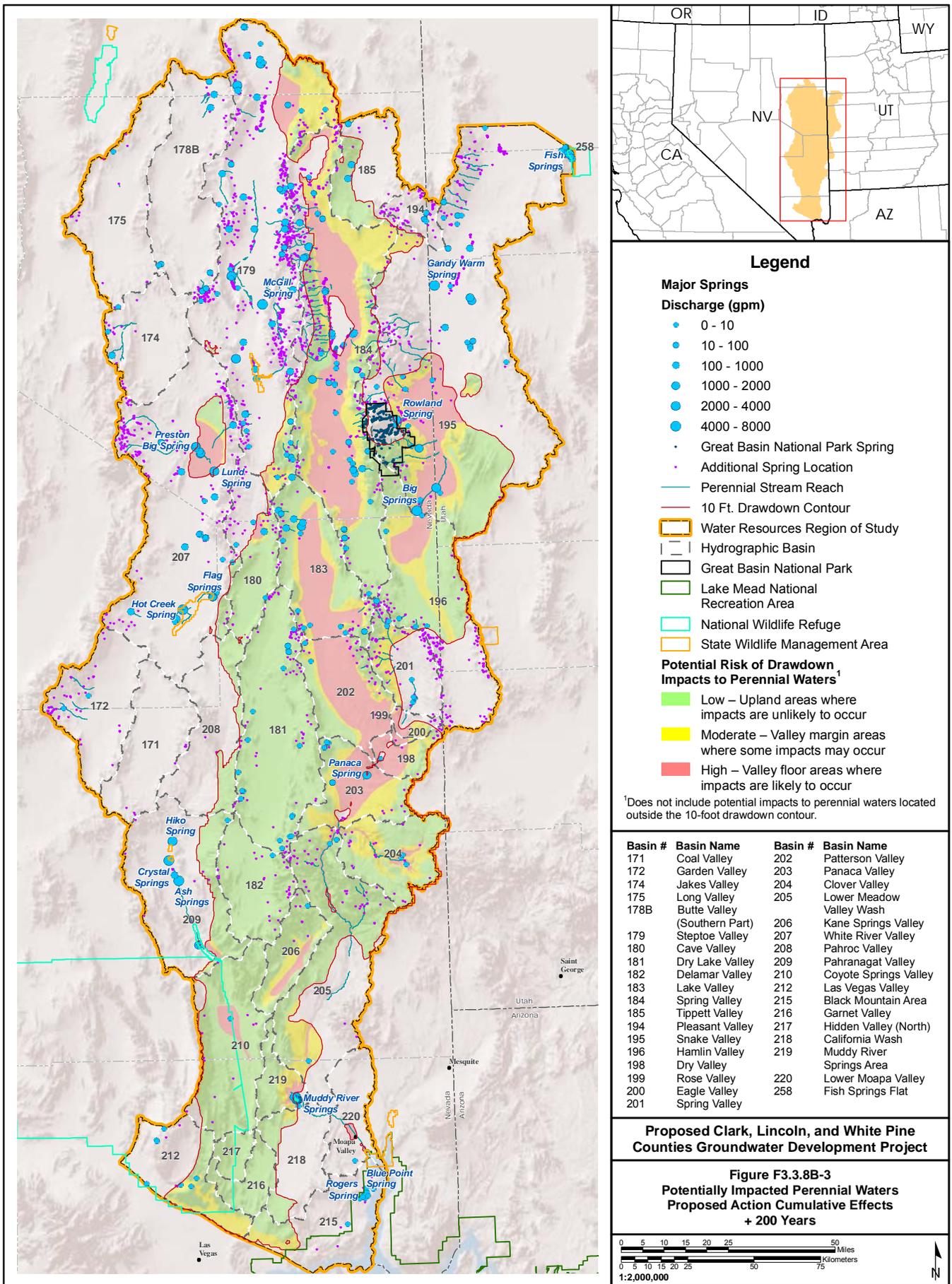
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181	Dry Lake Valley	209	Pahranagat Valley
182	Delamar Valley	210	Coyote Springs Valley
183	Lake Valley	212	Las Vegas Valley
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196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
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200	Eagle Valley		
201	Spring Valley		

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

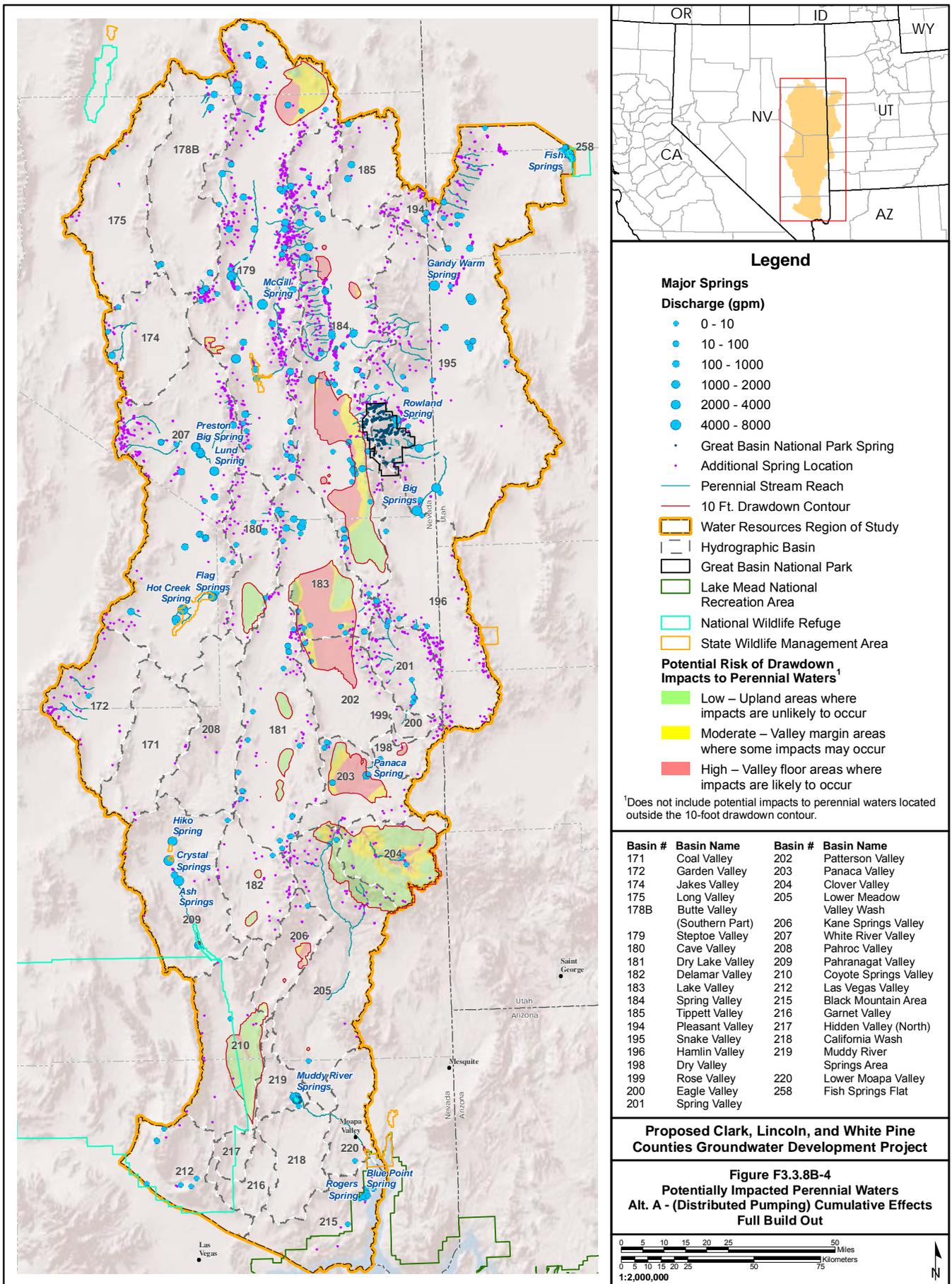
Figure F3.3.8B-2
Potentially Impacted Perennial Waters
Proposed Action Cumulative Effects + 75 Years

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

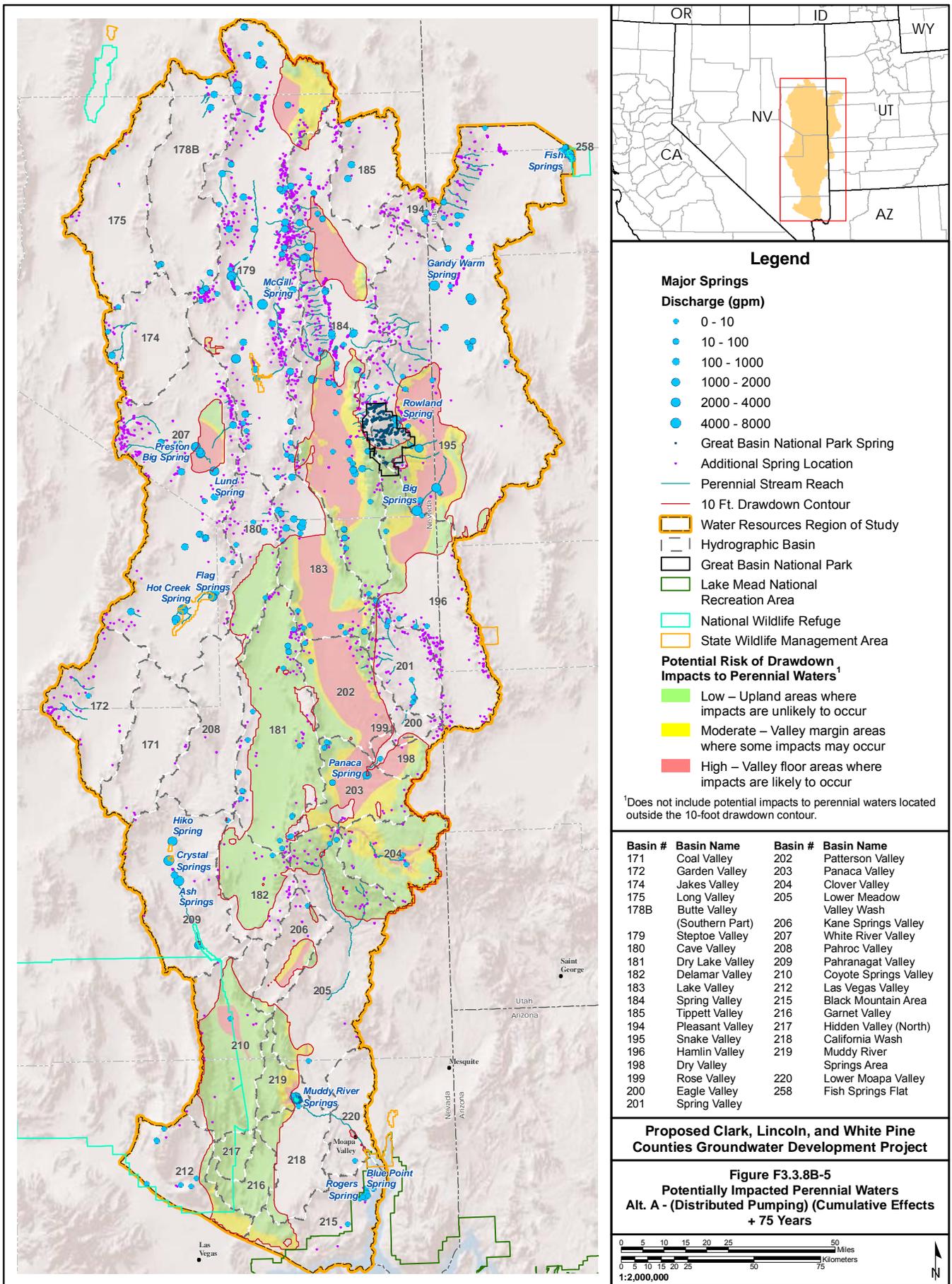
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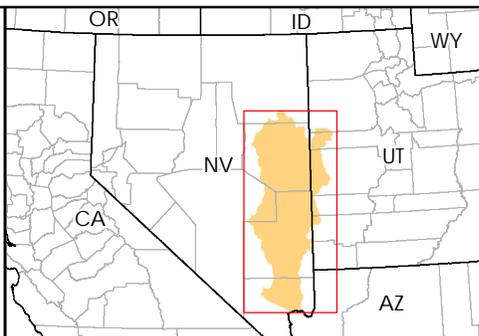
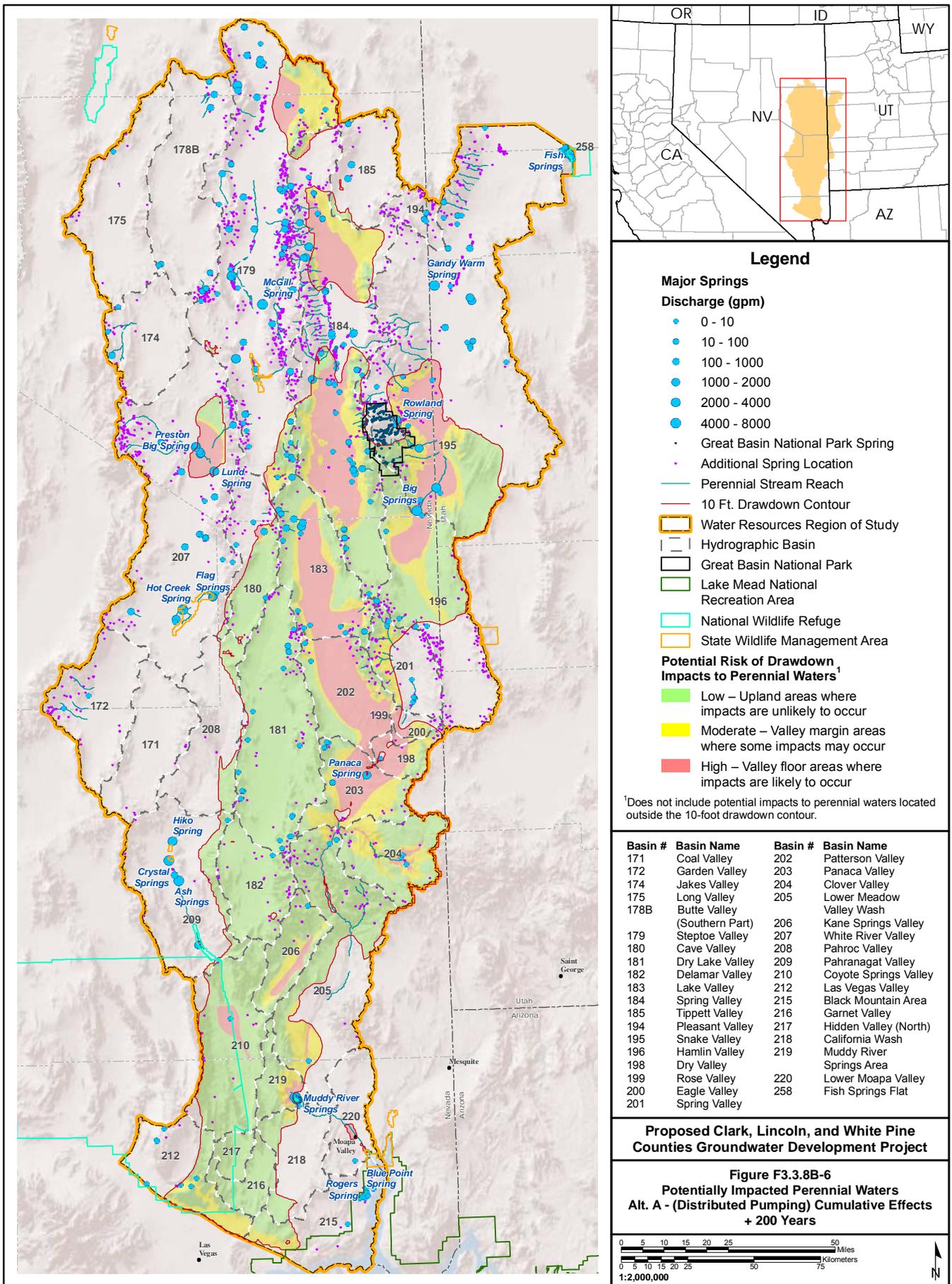
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Legend

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 Waters¹

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

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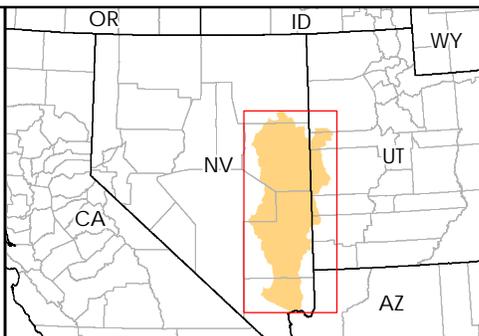
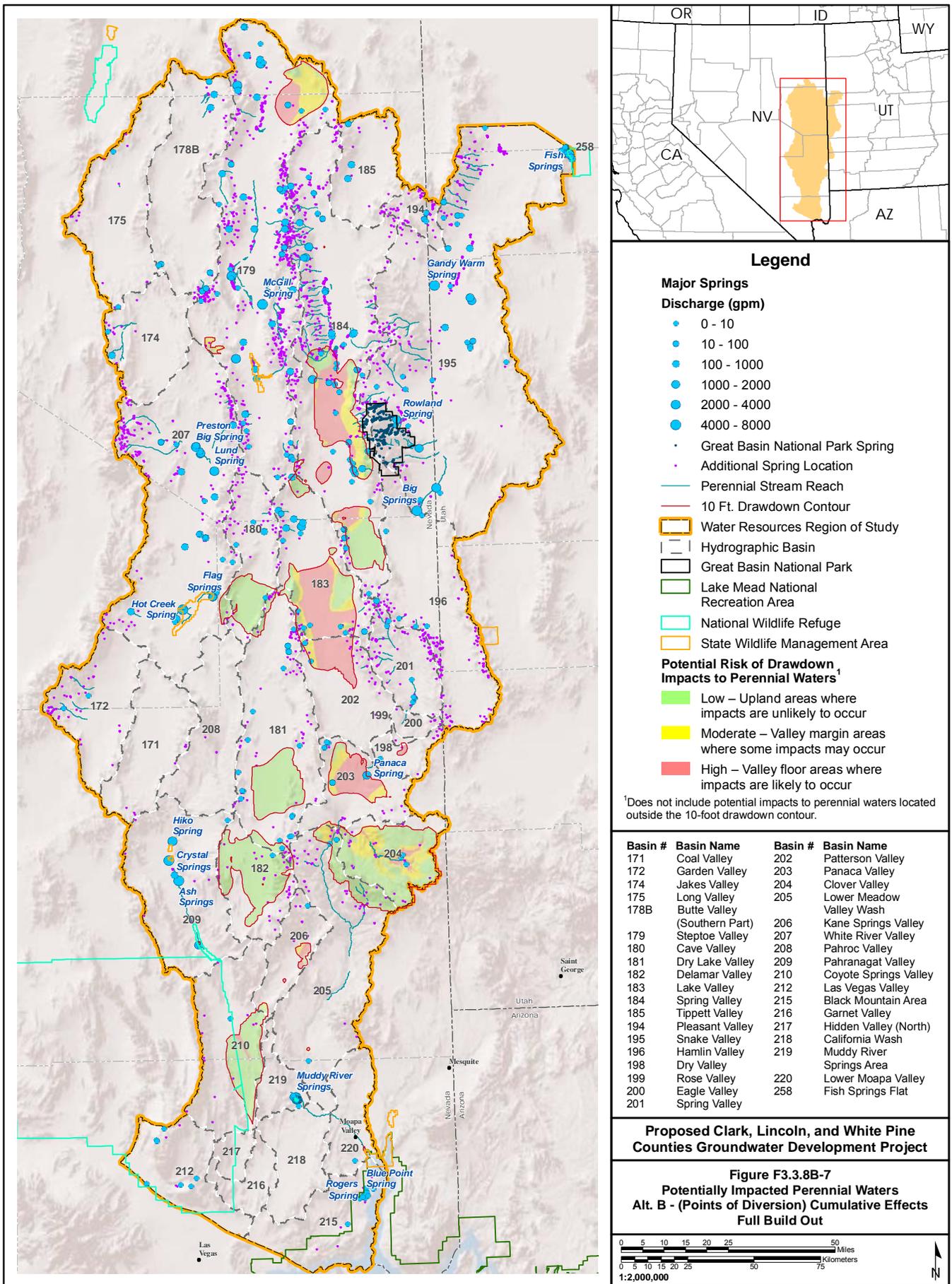
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174	Jakes Valley	204	Clover Valley
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180	Cave Valley	208	Pahroc Valley
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185	Tippett Valley	216	Garnet Valley
194	Pleasant Valley	217	Hidden Valley (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-6
Potentially Impacted Perennial Waters
Alt. A - (Distributed 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 Waters¹

- 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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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		

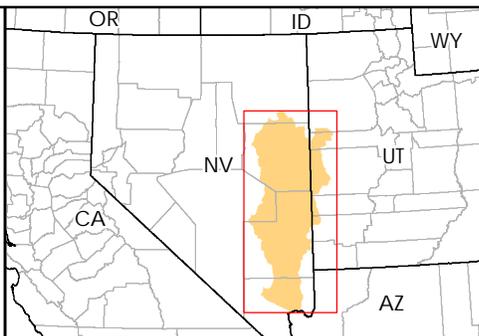
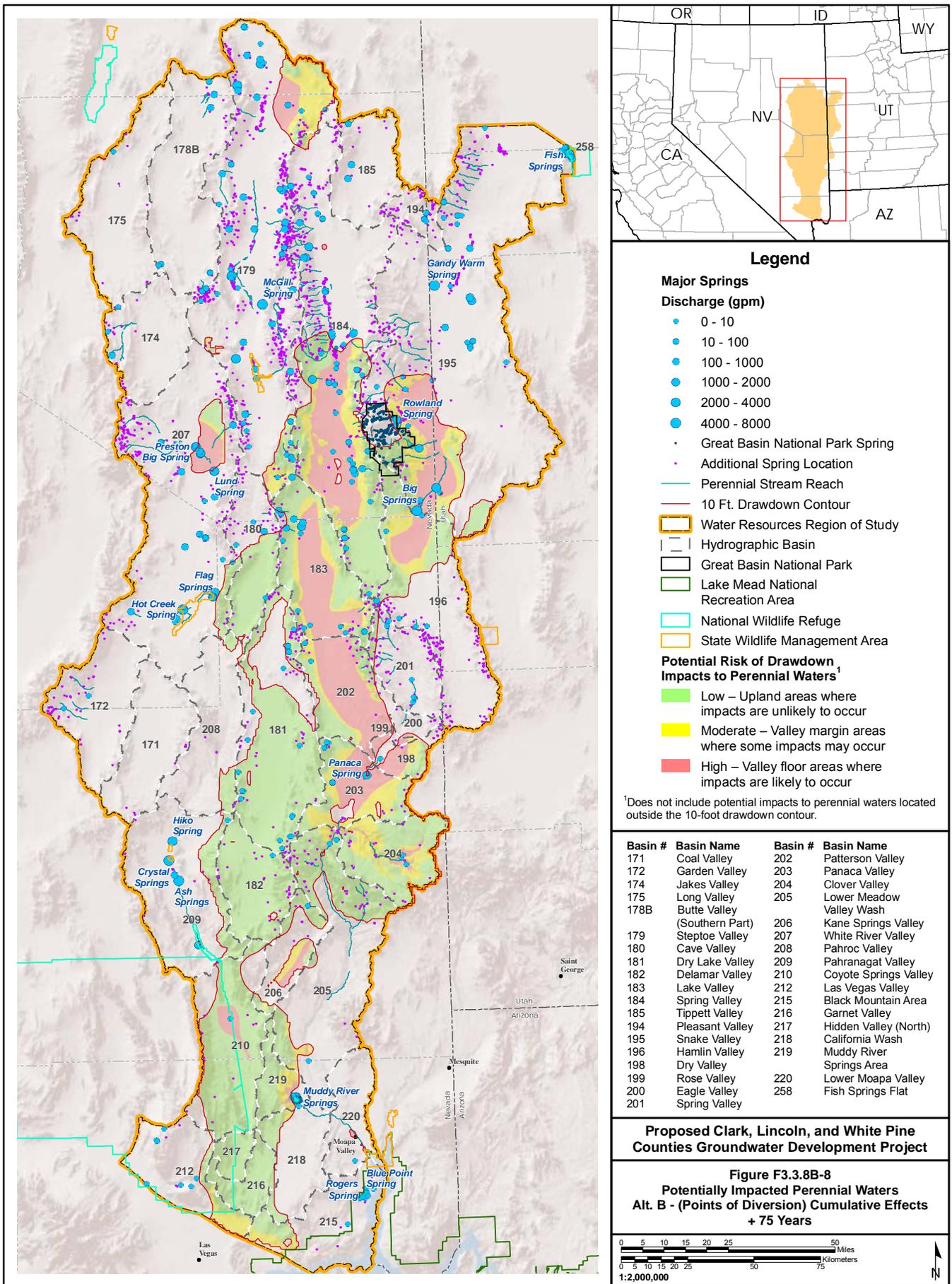
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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 Waters¹

- 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

¹Does 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		

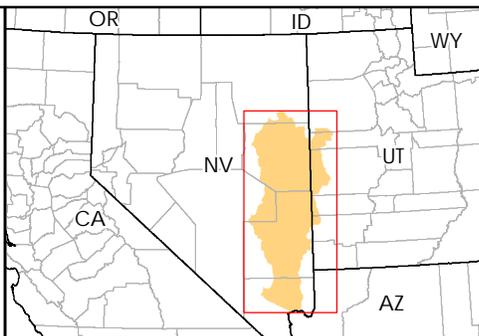
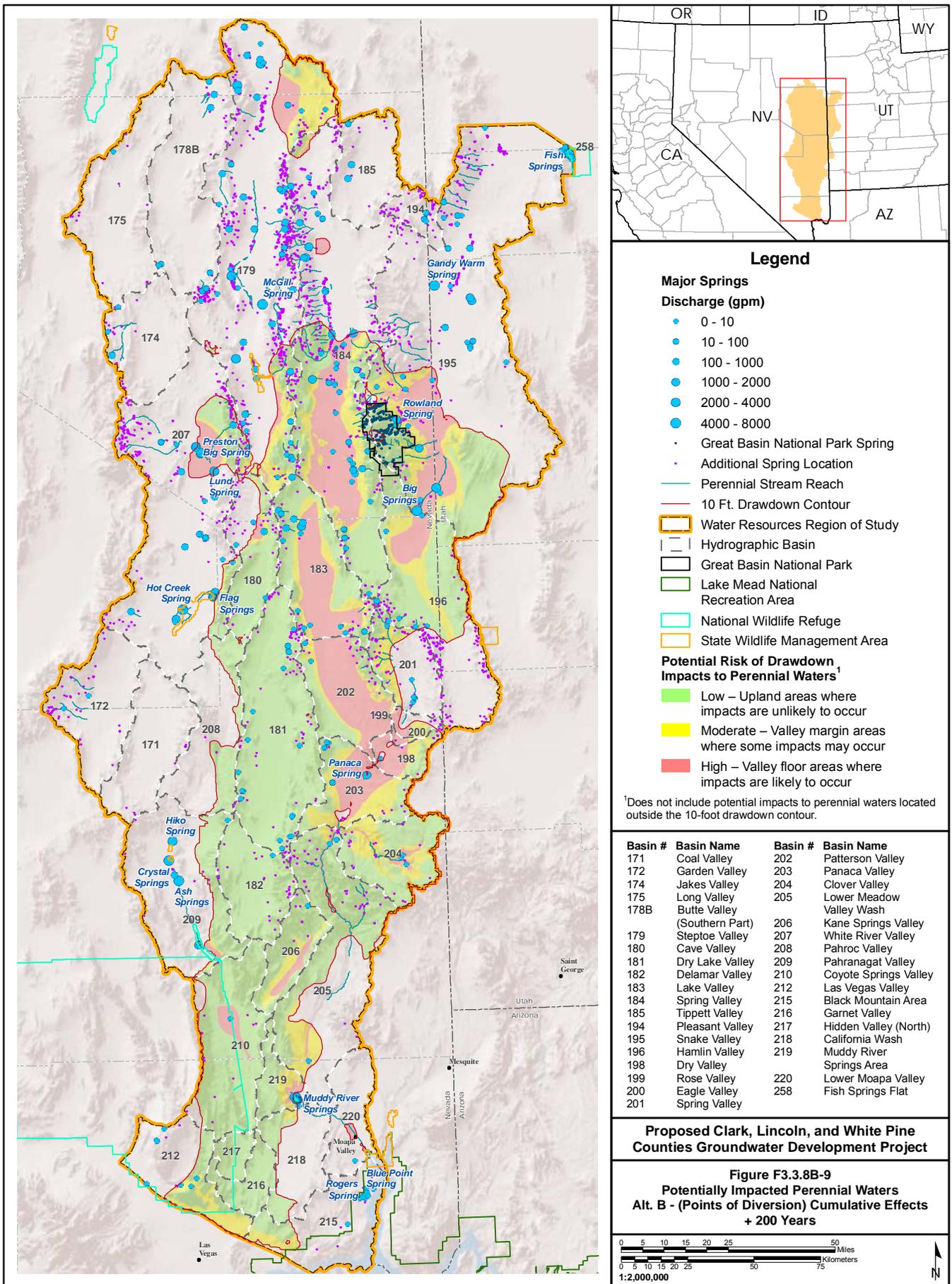
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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 Waters¹

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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		

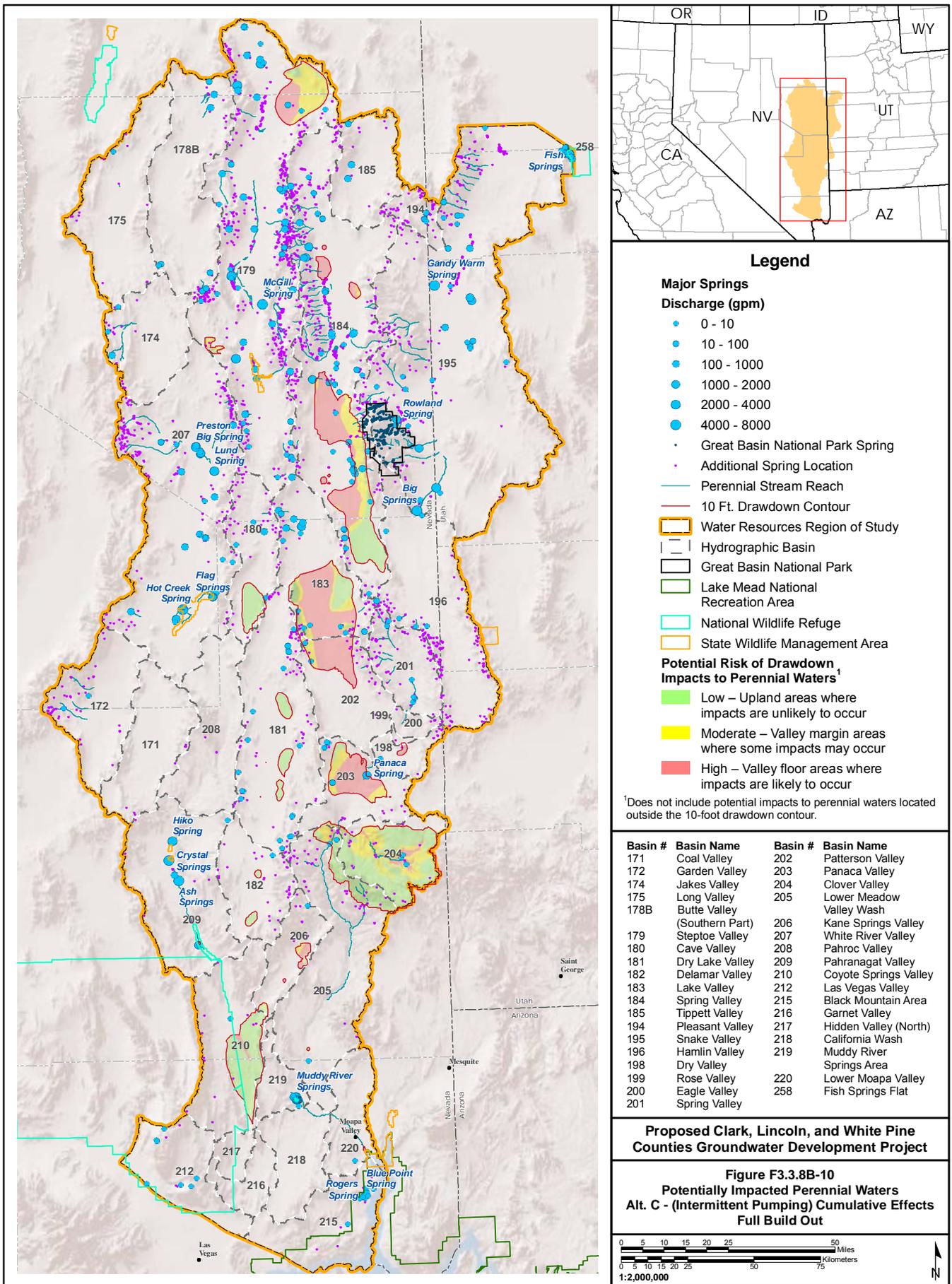
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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

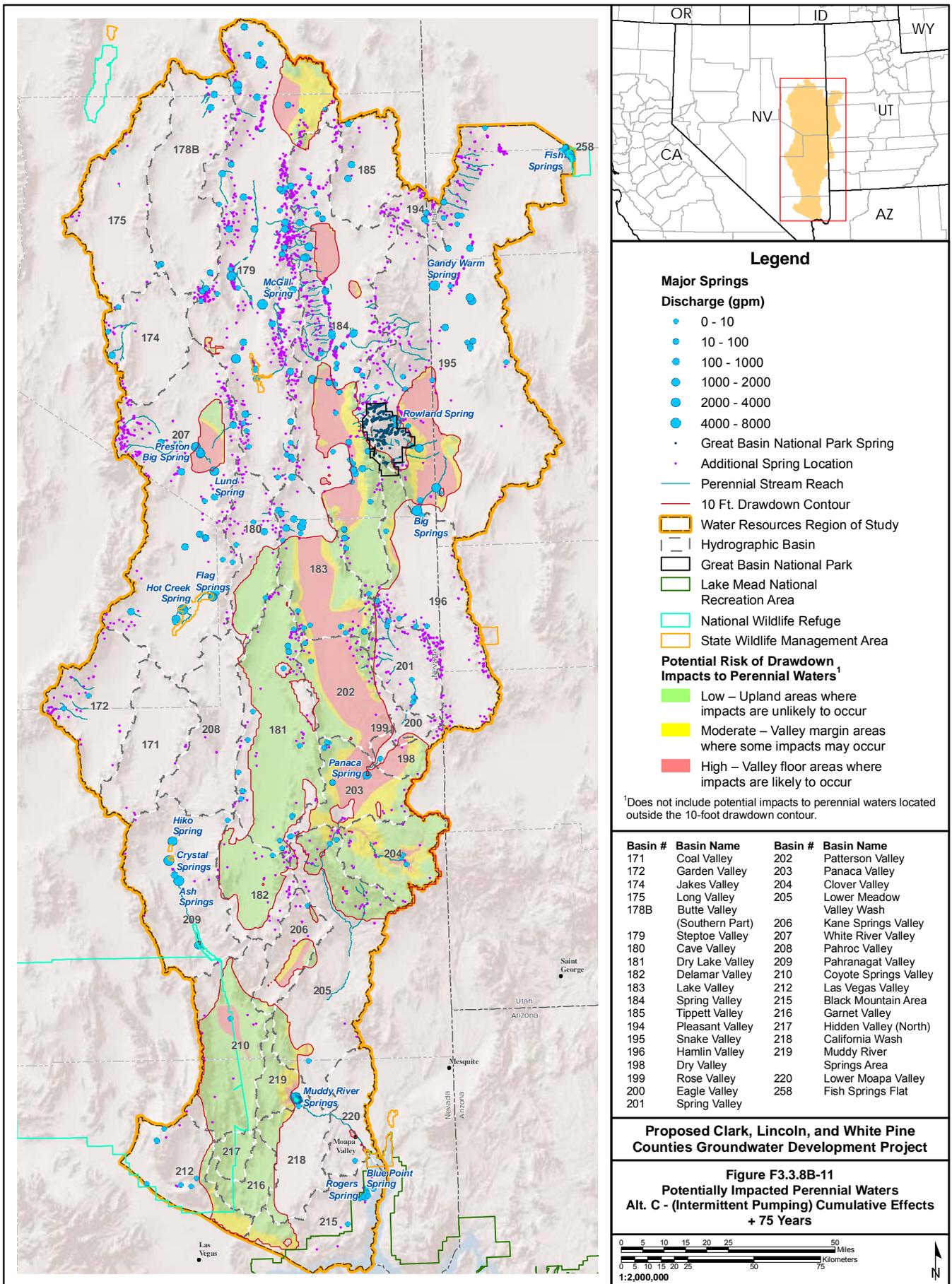
0 5 10 15 20 25 50 Miles
 0 5 10 15 20 25 50 75 Kilometers

1:2,000,000

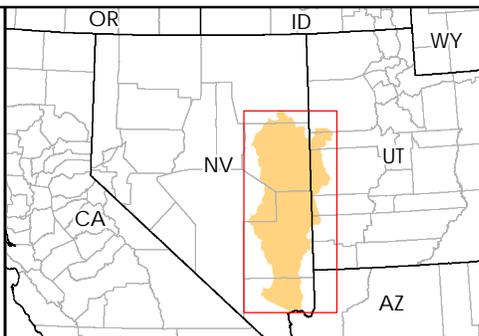
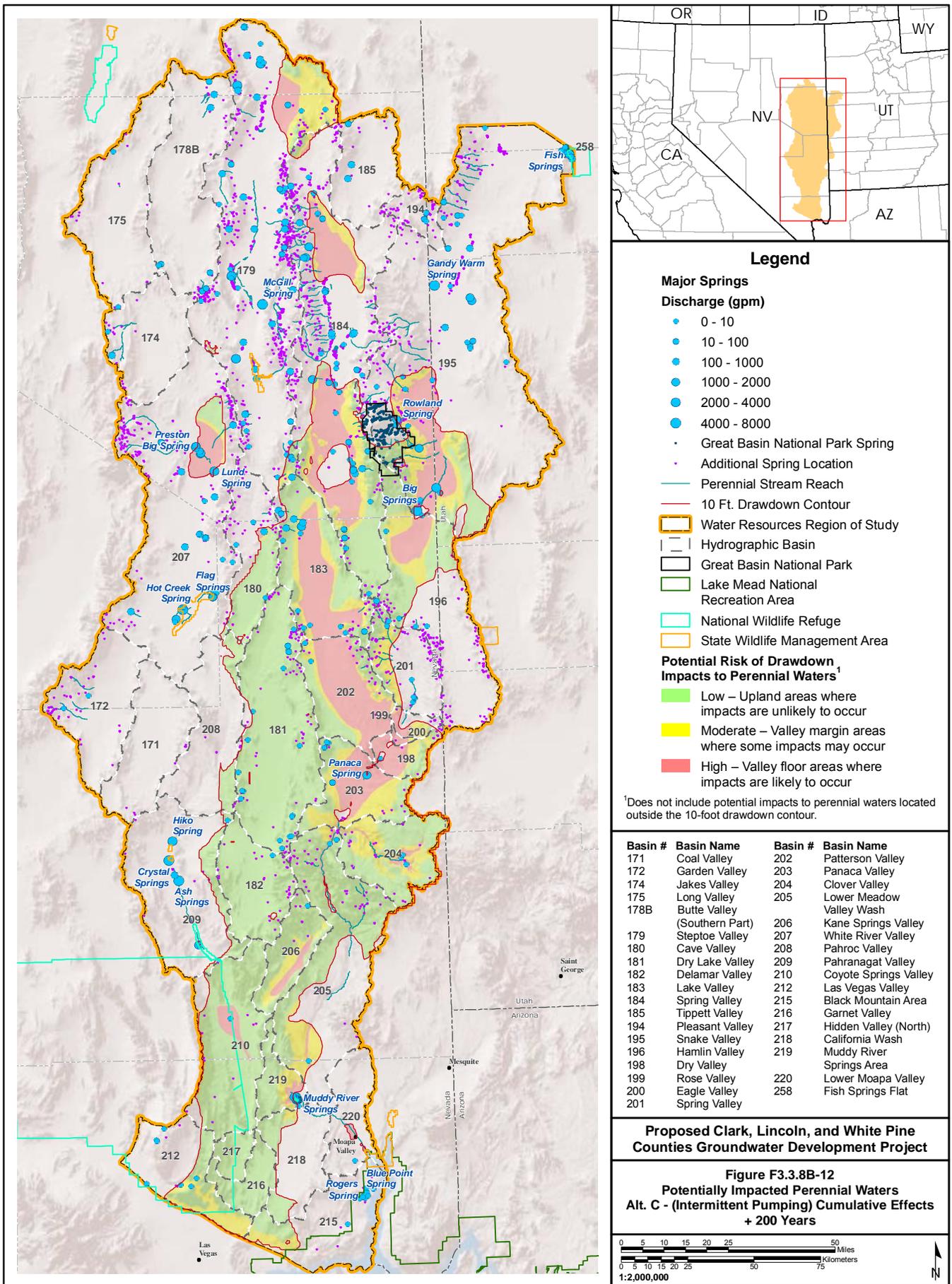
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Legend

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 Waters¹

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

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

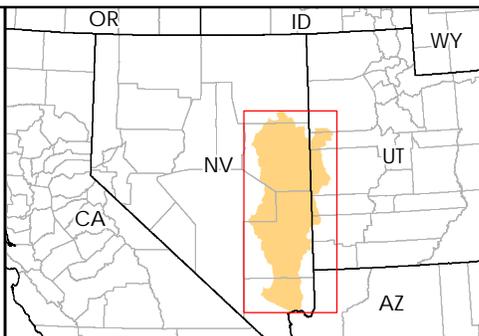
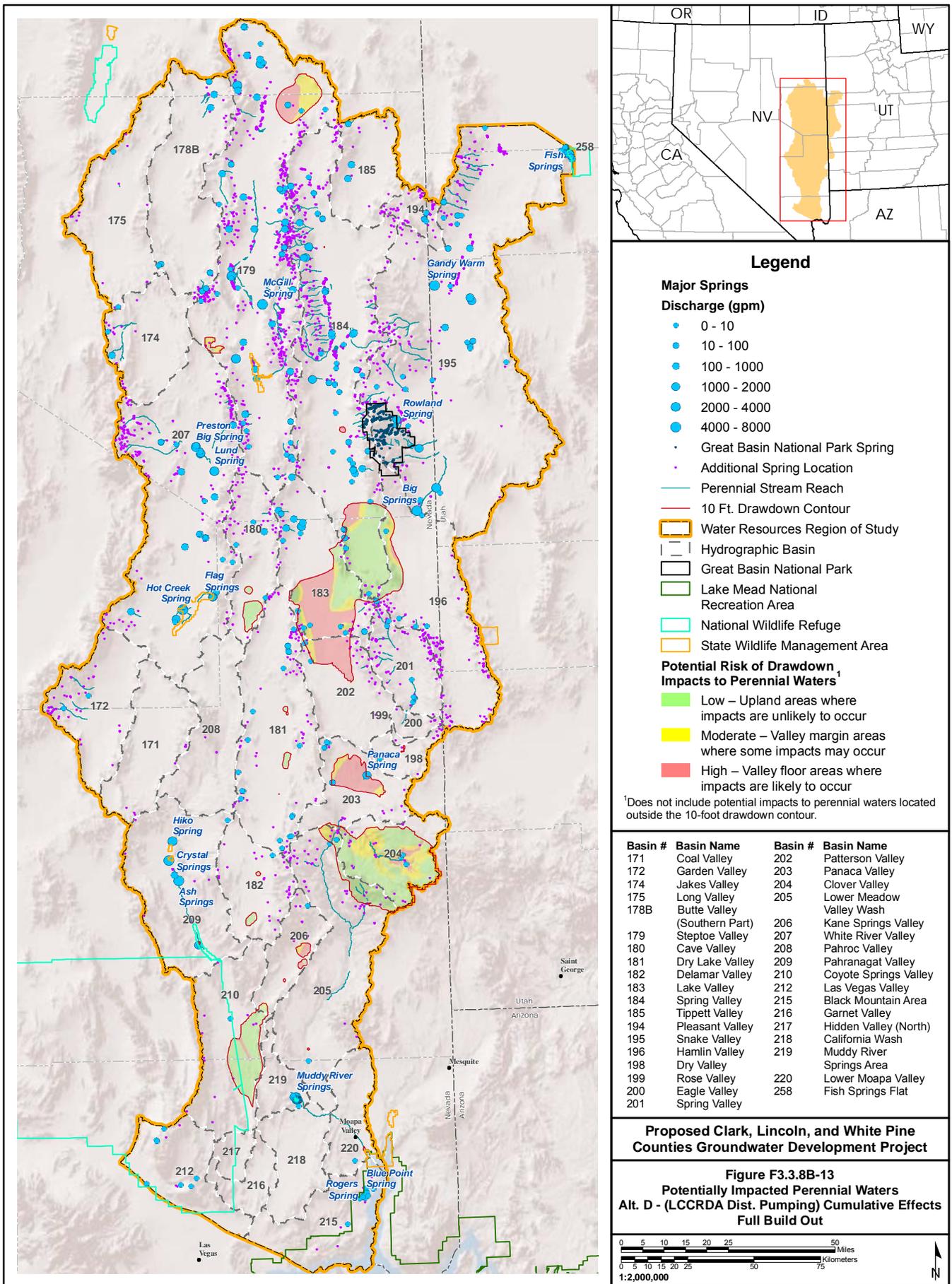
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195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

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

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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 Waters¹

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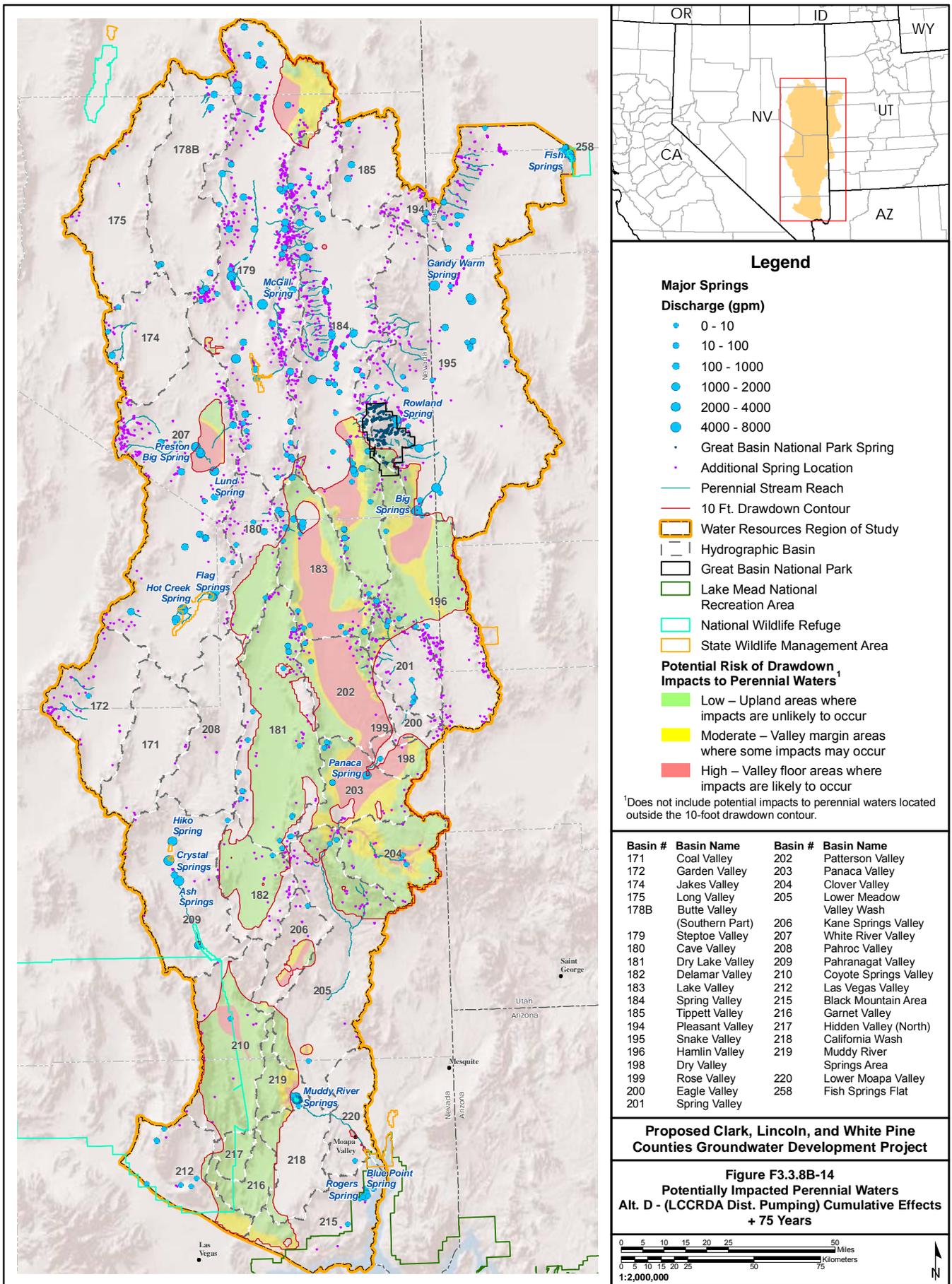
Basin #	Basin Name	Basin #	Basin Name
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198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

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

Figure F3.3.8B-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 Waters¹

- ▭ 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

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

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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		

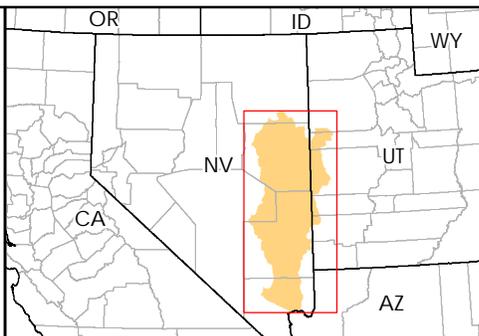
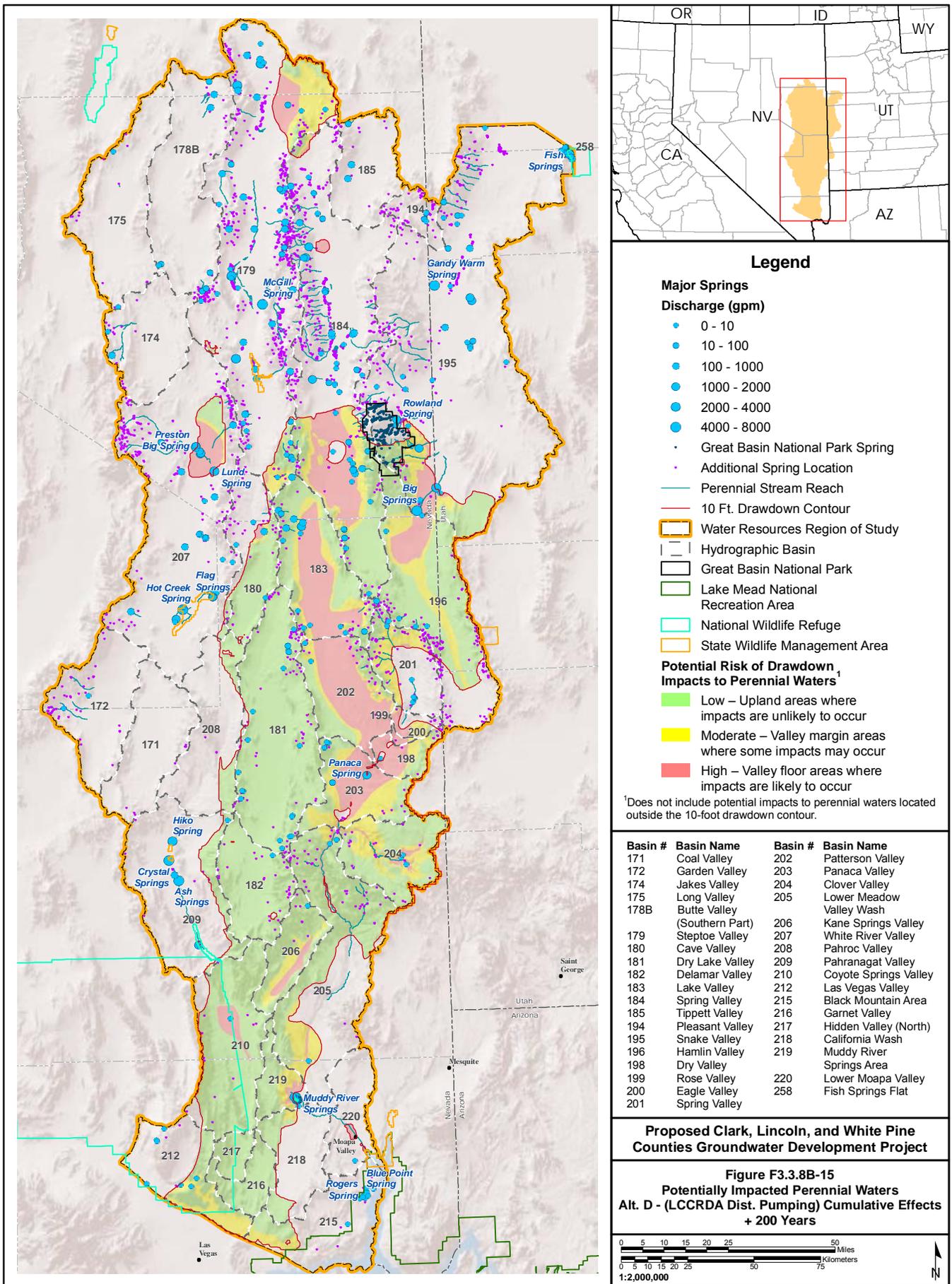
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

Figure F3.3.8B-14
Potentially Impacted Perennial Waters
Alt. D - (LCCRDA Dist. Pumping) 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 Waters¹

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

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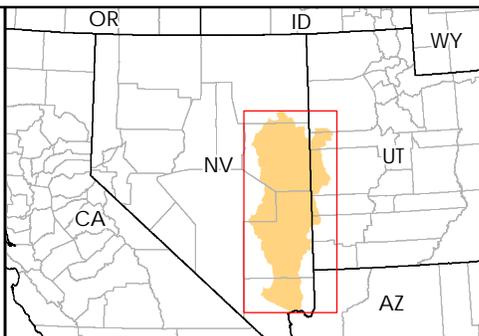
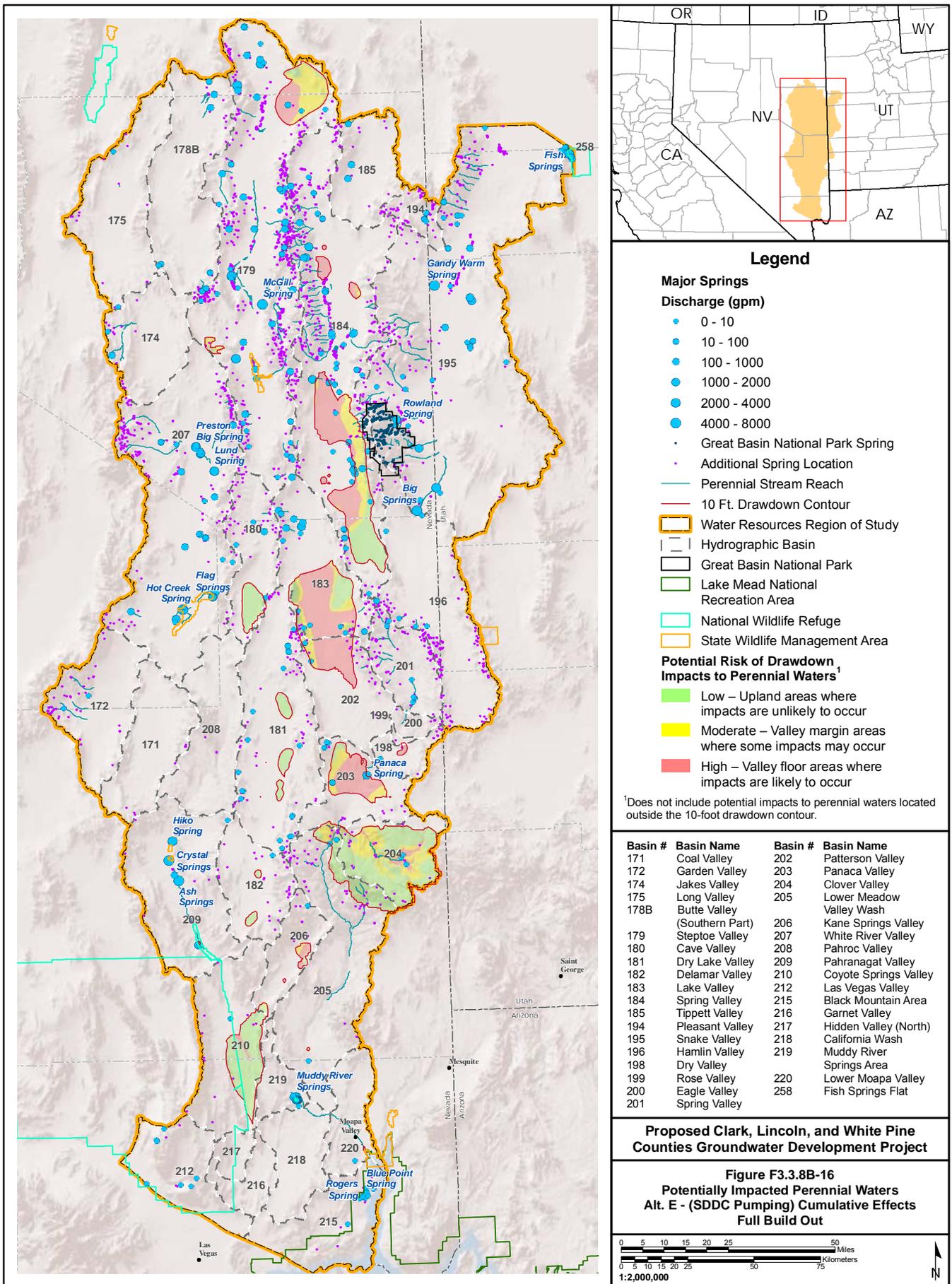
Basin #	Basin Name	Basin #	Basin Name
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195	Snake Valley	218	California Wash
196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

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



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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 Waters¹

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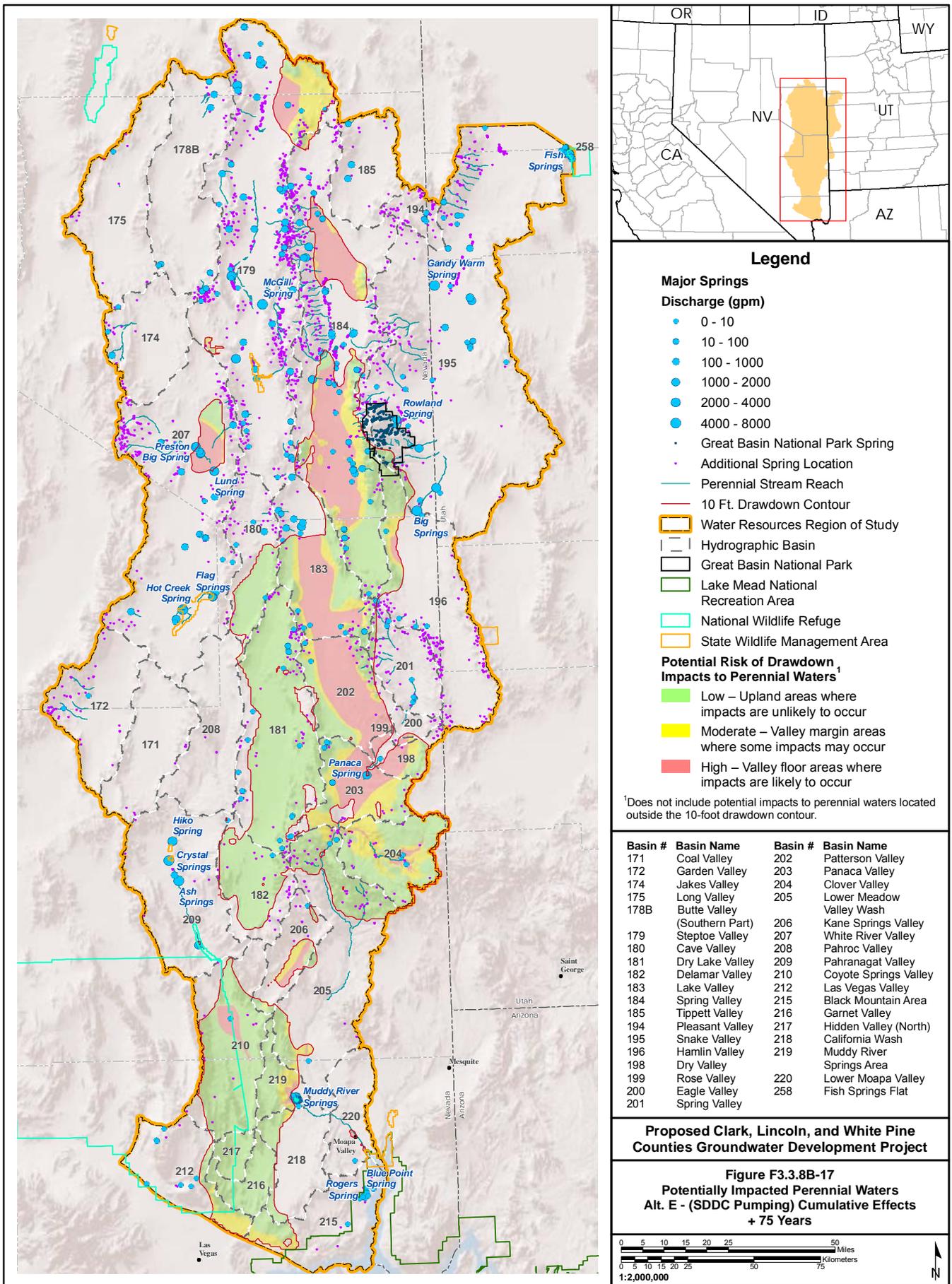
Basin #	Basin Name	Basin #	Basin Name
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196	Hamlin Valley	219	Muddy River Springs Area
198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	258	Fish Springs Flat
200	Eagle Valley		
201	Spring Valley		

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

Figure F3.3.8B-16
Potentially Impacted Perennial Waters
Alt. E - (SDDC 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

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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

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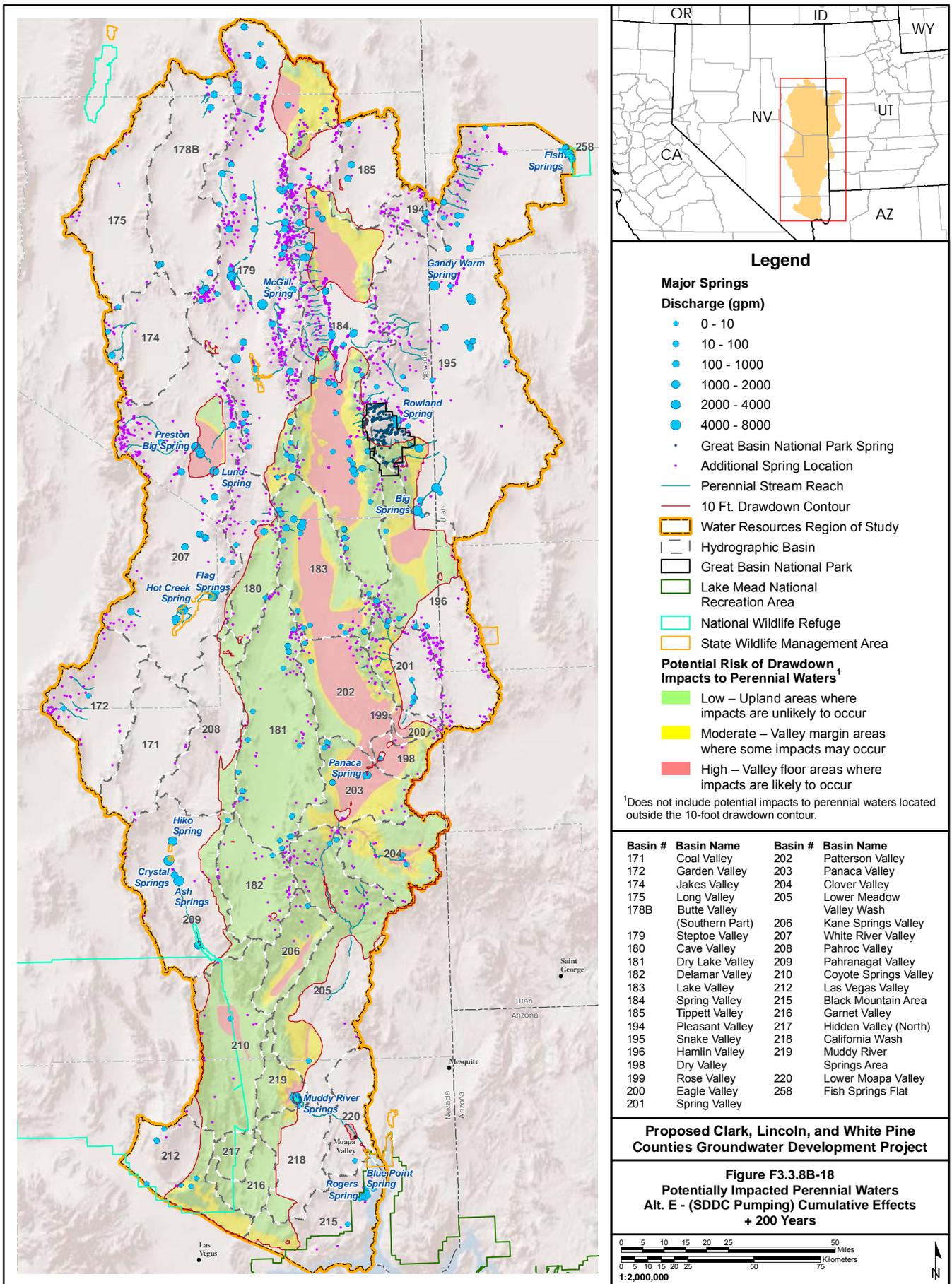
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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

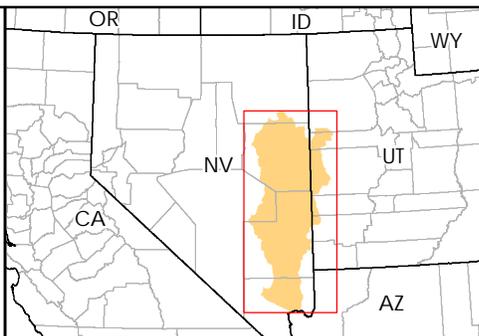
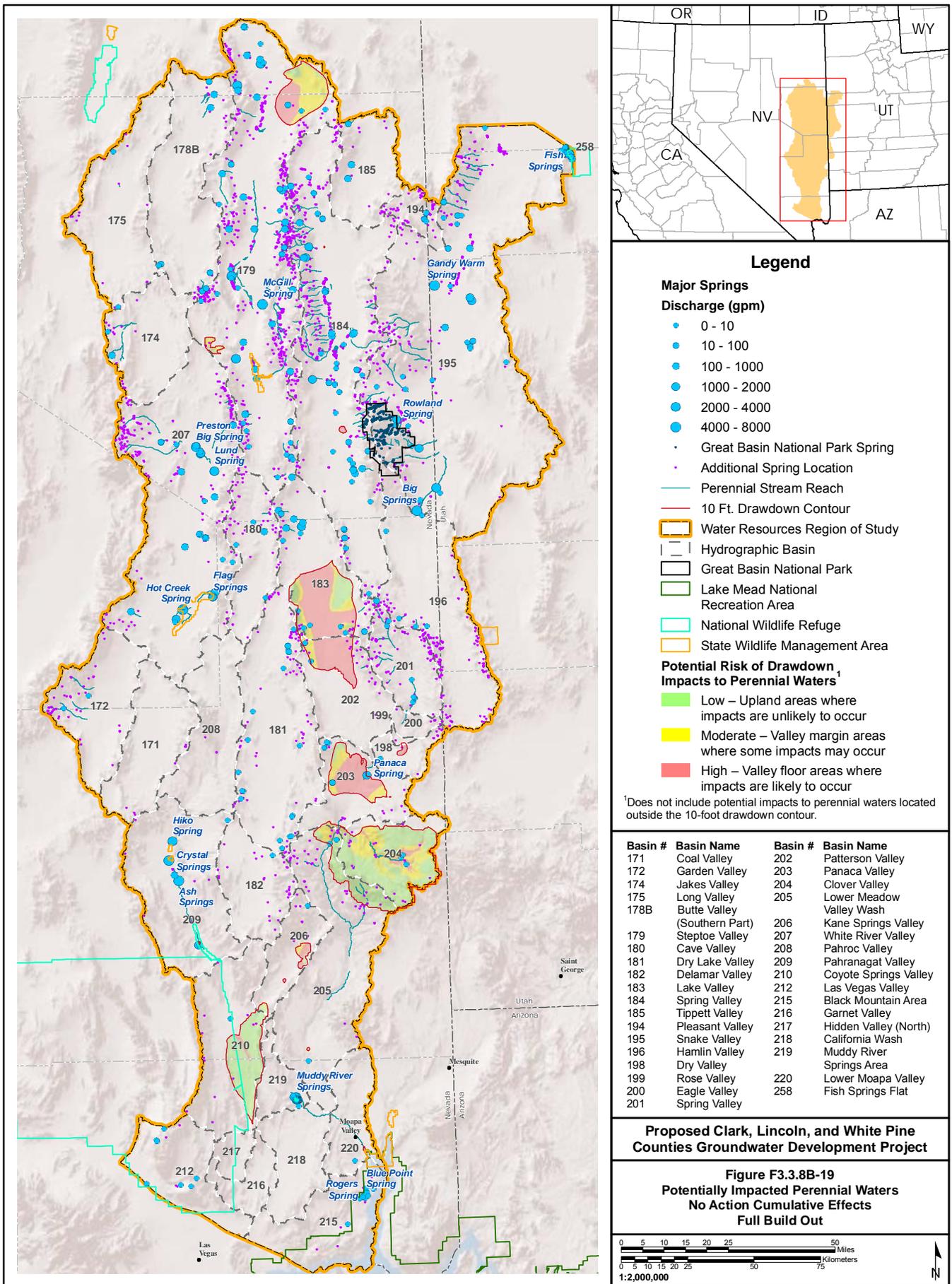
0 5 10 15 20 25 50 Miles
 0 5 10 15 20 25 50 75 Kilometers

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 Waters¹

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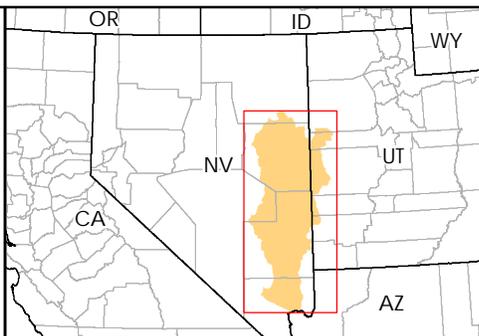
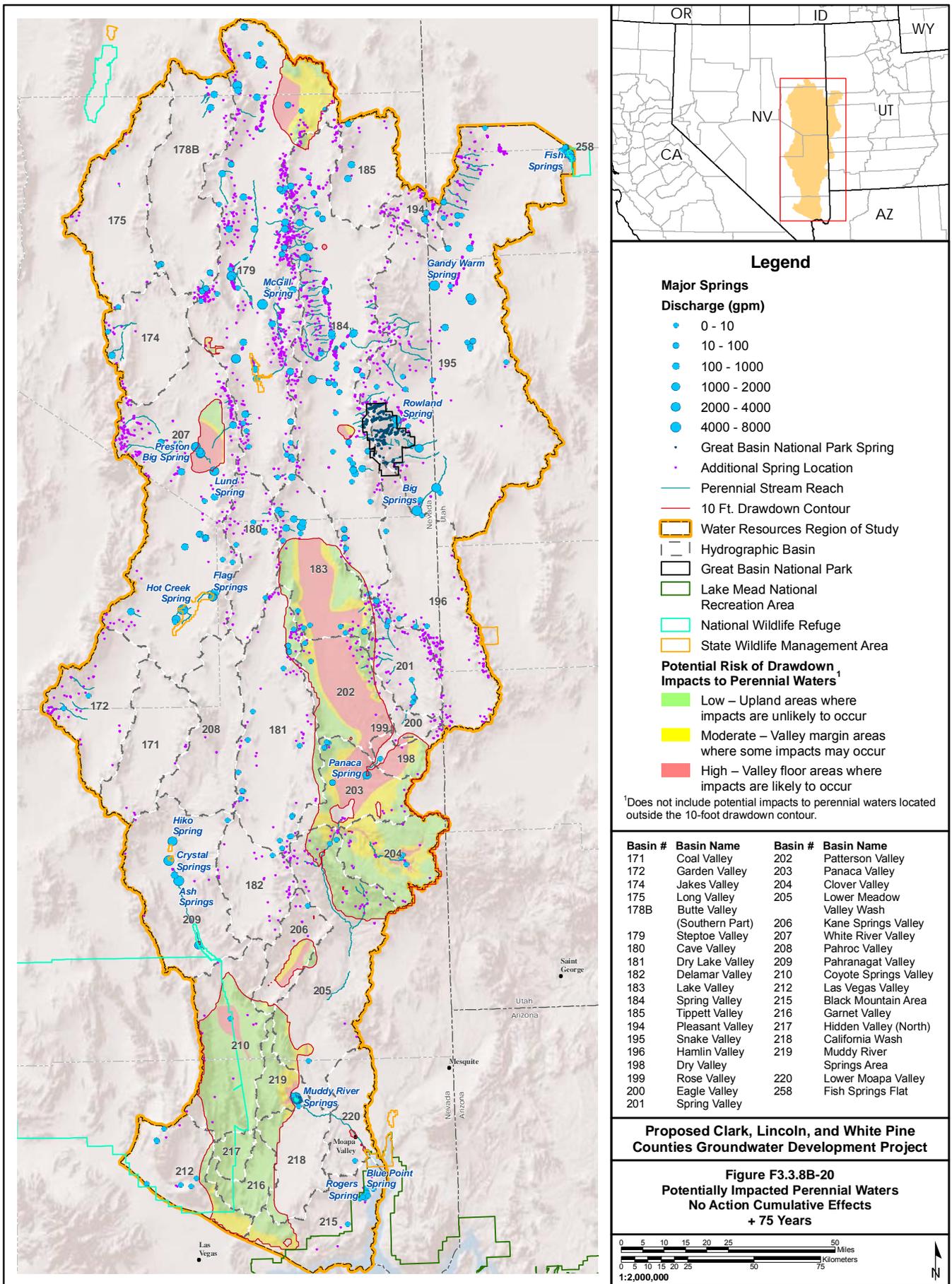
Proposed Clark, Lincoln, and White Pine Counties Groundwater Development Project

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

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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
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Potential Risk of Drawdown Impacts to Perennial Waters¹

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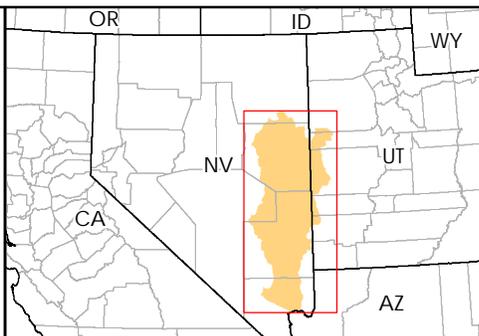
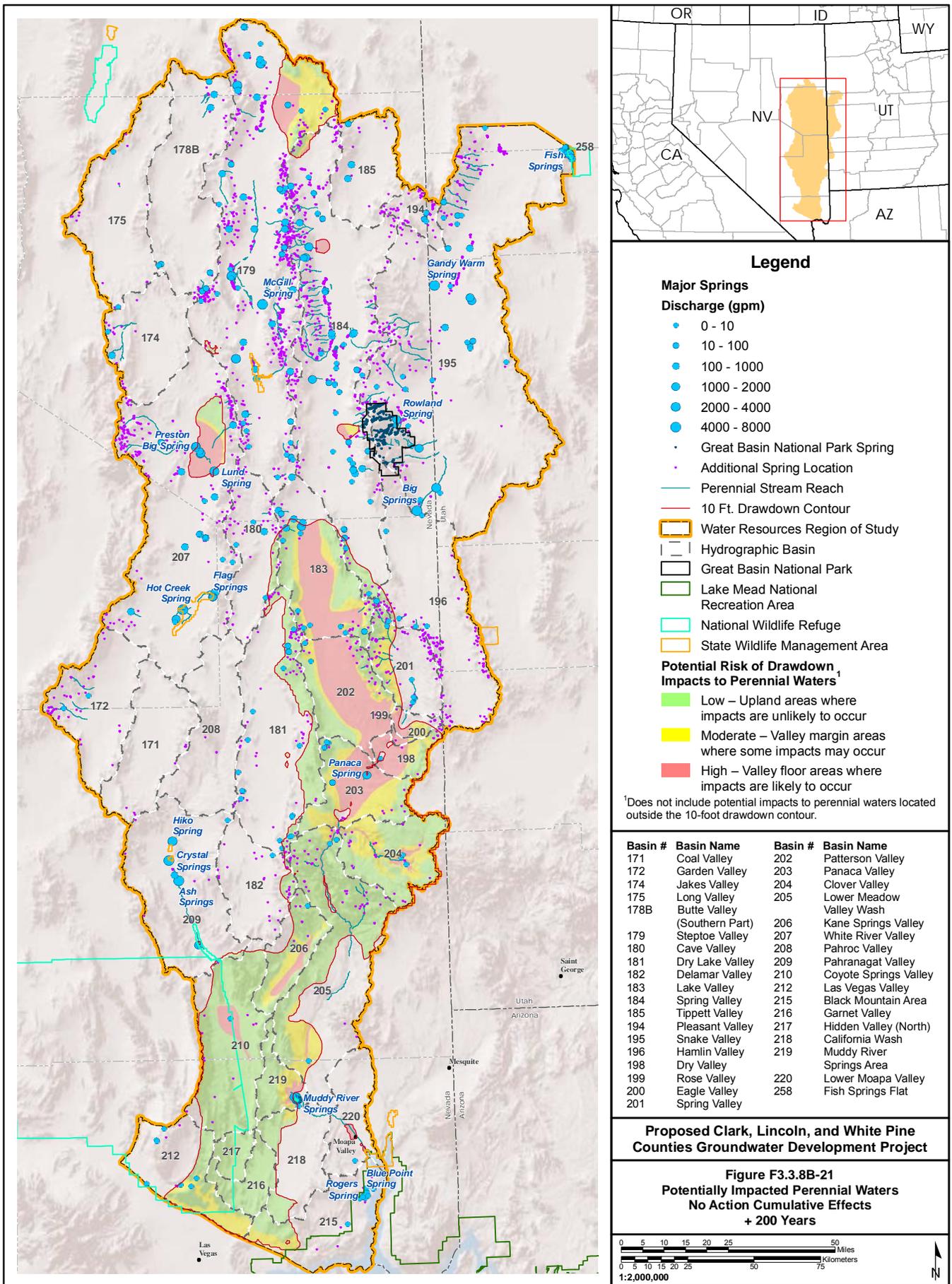
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198	Dry Valley	220	Lower Moapa Valley
199	Rose Valley	220	Lower Moapa Valley
200	Eagle Valley	258	Fish Springs Flat
201	Spring Valley		

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

Figure F3.3.8B-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 Waters¹

- Low – Upland areas where impacts are unlikely to occur
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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 F3.3.8B-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

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.