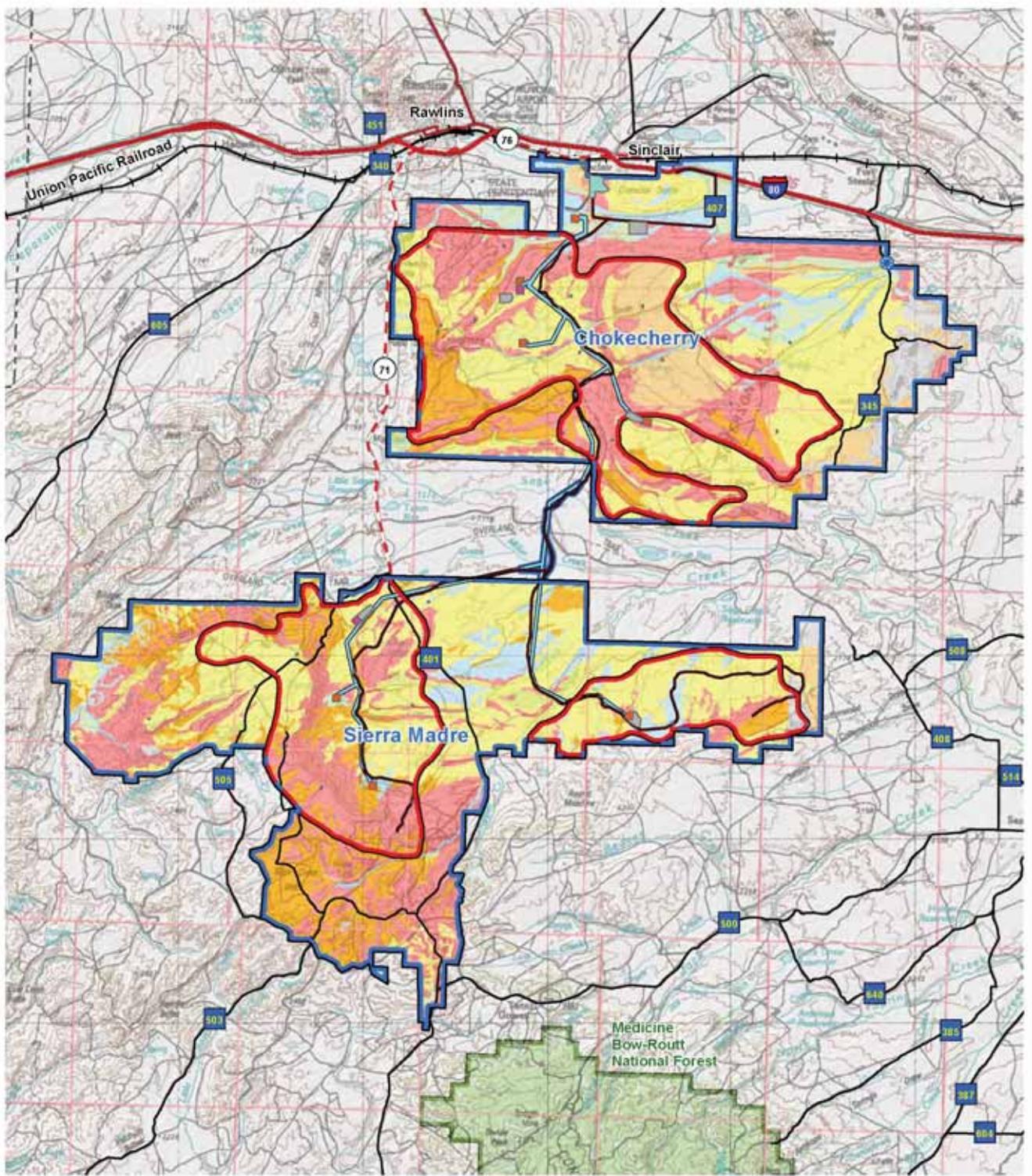


## **Appendix F**

### **Soils Environmental Consequences Figures, Soils Site Photos, and Mapbook**

X:\06\project\12007\_001\_Wyoming\Wind\figure\4.9-F-1S\_2012\Volume4\Appendix\Figure\_4.9-F-1\_A1R\_WaterErosion\_20120215.mxd



**Legend**

Water Extraction Site	Project Area
Transmission Line	<b>Water Erosion Hazard</b>
Haul Road	Slight
Likely Area of Turbine Construction	Slight to Moderate
O&M Building	Slight to Severe
Rail Distribution Facility	Moderate
Laydown Area (Construction Only)	Moderate to Severe
Substation	Severe
	No Data

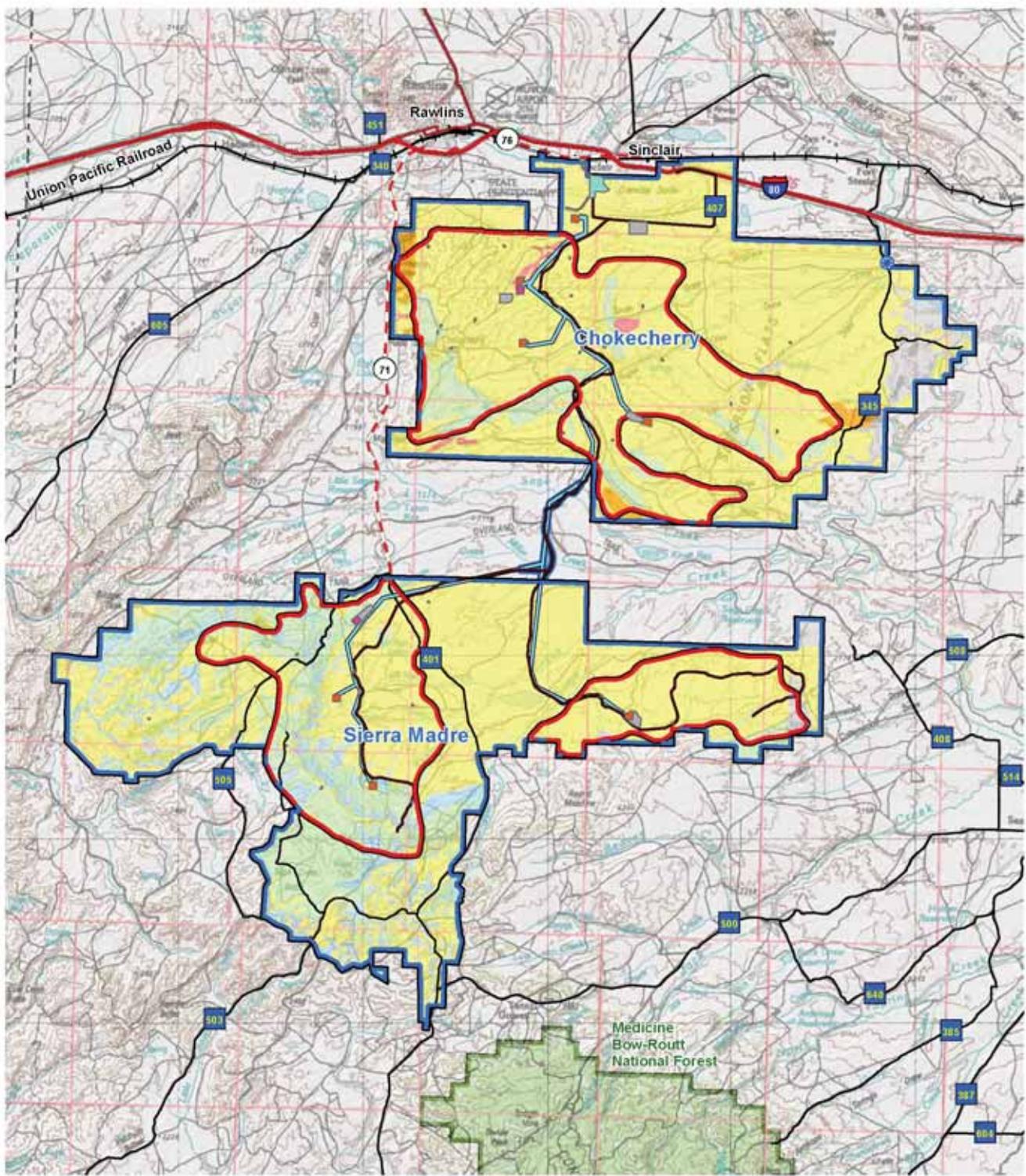
**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4.9-1**

**Water Erosion Hazard Impacts  
Associated with Alternative 1R**

1:320,000

X:\05\project\1207\_001\_Wyoming\_Wind\figure\15\F15\_2012\Volume\Appendix\Figure\_4\_09\_02\_A11R\_WindErosion\_20120215.mxd



**Legend**

Water Extraction Site	Transmission Line
Project Area	Haul Road
Likely Area of Turbine Construction	<b>Wind Erosion Hazard</b>
O&M Building	Slight
Rail Distribution Facility	Slight to Moderate
Laydown Area (Construction Only)	Moderate
Substation	Moderate to Severe
	Severe
	No Data

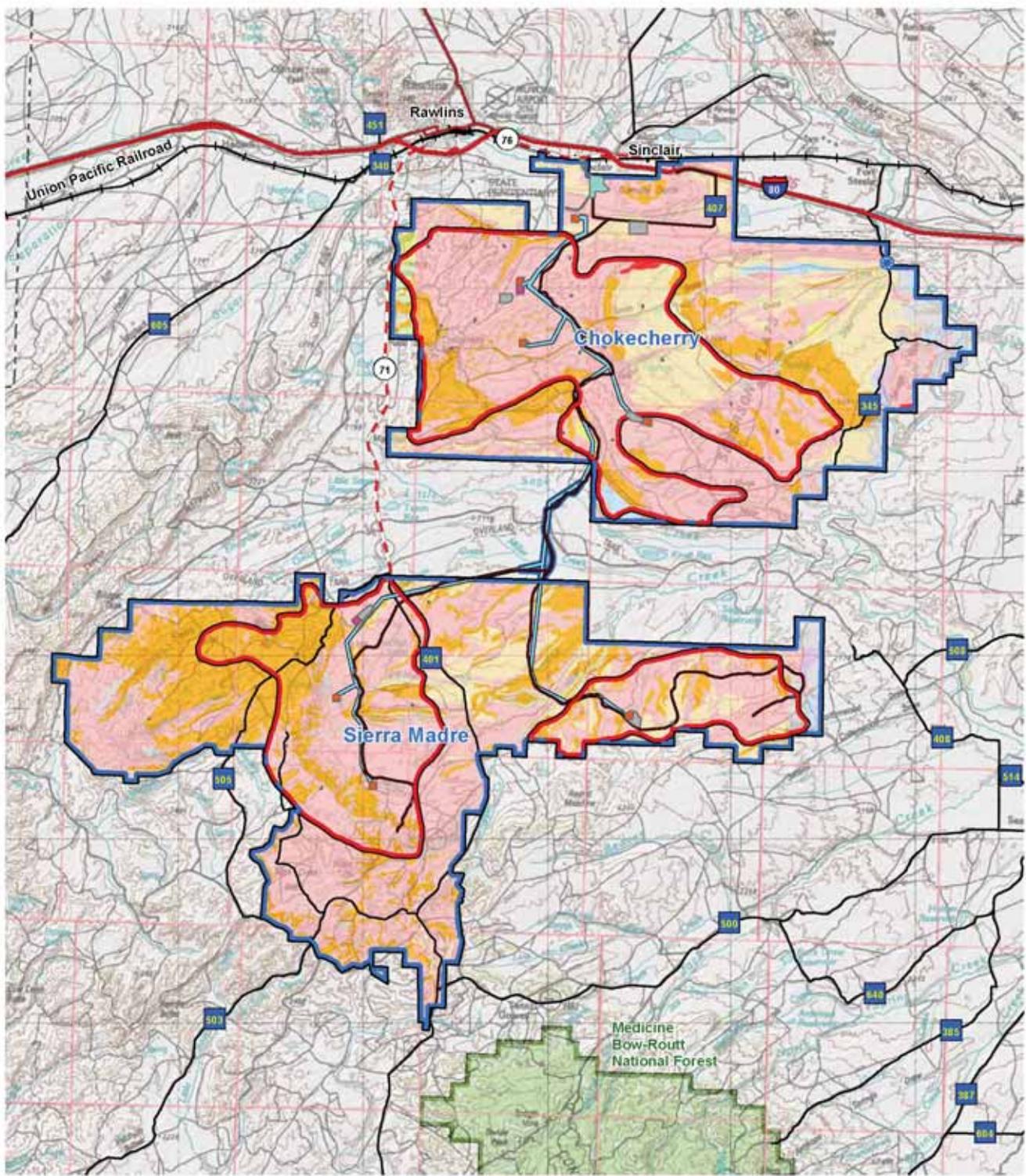
**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4.9-2**

**Wind Erosion Hazard Impacts  
Associated with Alternative 1R**

1:320,000

X:\06\project\1207\_001\_Wyoming\_Visual\figure\15\Fig\_15\_2012\Volume4\Appendix\Figure\_4\_09\_03\_A1R1\_P runoff.dem.mxd



**Legend**

Water Extraction Site	Project Area
Transmission Line	<b>Surface Runoff Potential</b>
Likely Area of Turbine Construction	Very Low
O&M Building	Low
Rail Distribution Facility	Low to Moderate
Laydown Area (Construction Only)	Low to High
Substation	Moderate
	Moderate to High
	High
	Very High
	No Data

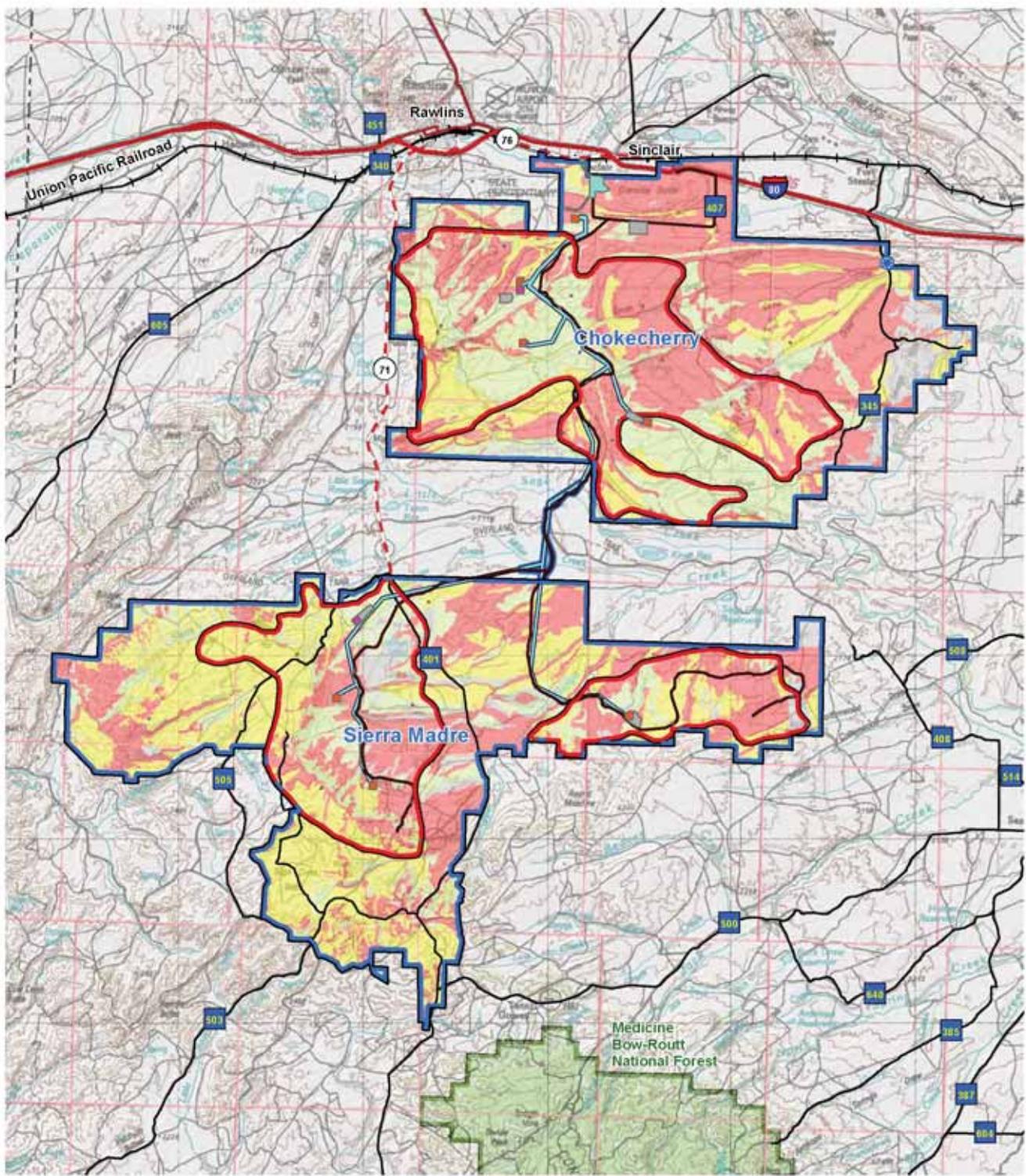
**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4.9-3**

**Surface Runoff Potential - Impacts  
Associated with Alternative 1R**

1:320,000

X:\06\project\12007\_001\_Wyoming\_Visual\figure\15\Figure\_4.9-4\_A1R\_TopsoilRating\_20120315.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Topsoil Rating**

- Good
- Fair
- Poor
- No Data

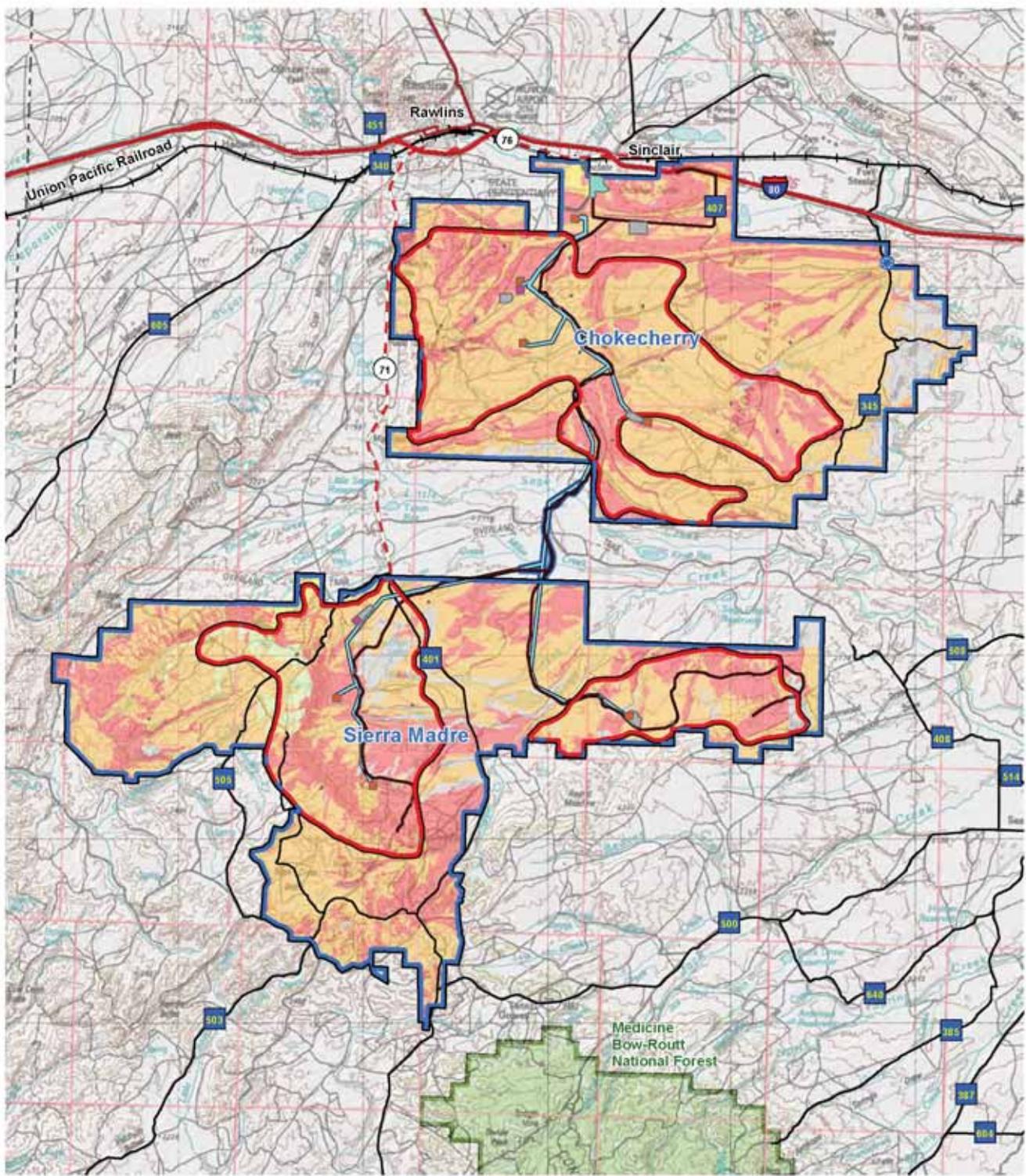
**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-4**

**Impacts to Topsoils Associated with Alternative 1R**

1:320,000

X:\06\project\2007\_001\_Wyoming\Wind\figure\4.9-F-5\_2012\Volume\Appendix\Figure\_4.9-5\_2012\_A1R\_RoadLimiting\_20120115.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Road Limitations**

- Slight
- Slight to Moderate
- Moderate
- Severe
- No Data

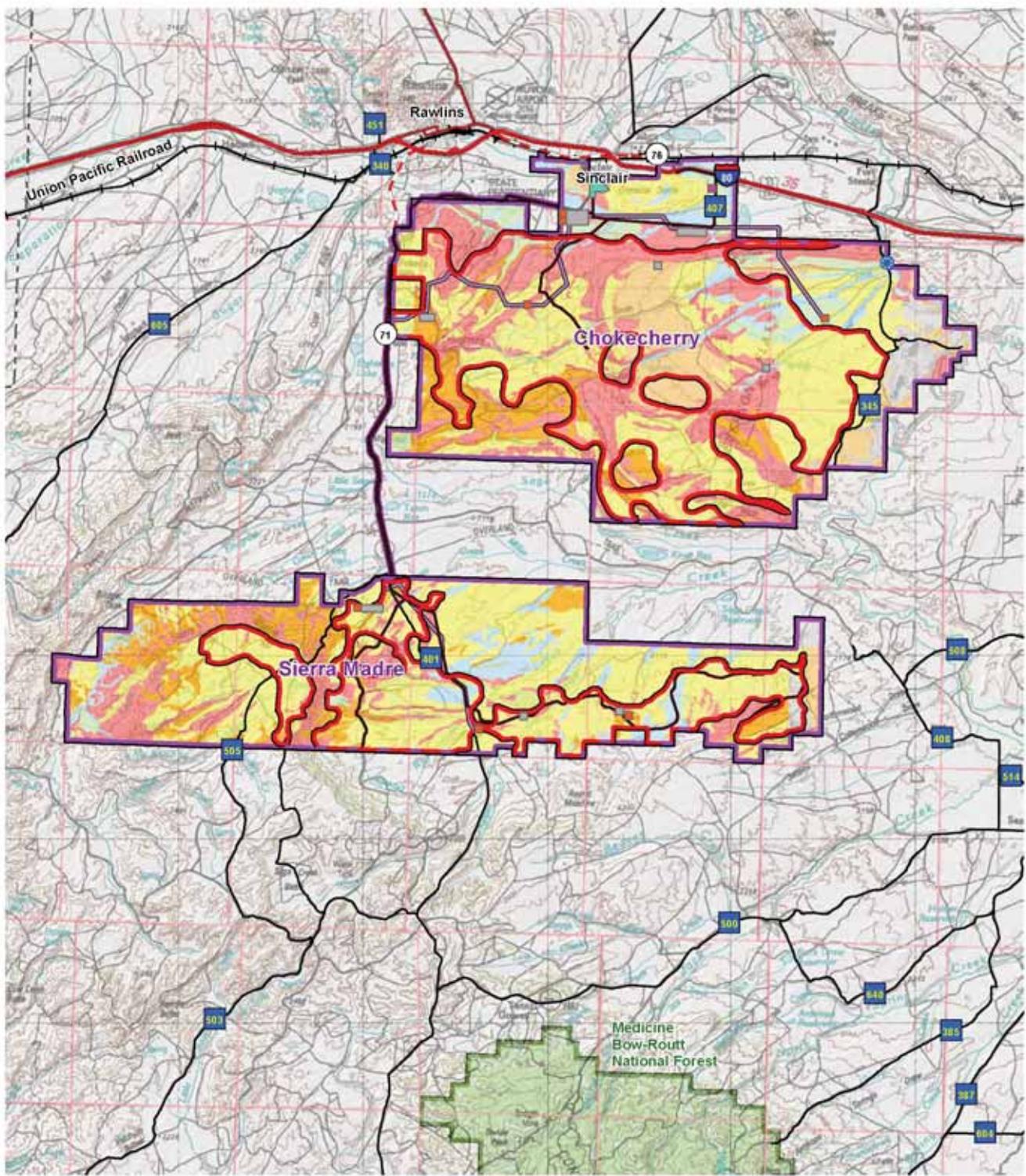
**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-5**

**Road Limitations Associated with Alternative 1R**

1:320,000

X:\projects\12207\_001\_Wyoming\Wind\figures\15\Fig15\_2012\Volume4\Appendix\Figure\_4.9-6\_Arc2\_Volume4.aprx\_20120216.mxd



**Legend**

Water Extraction Site	Project Area
Transmission Line	<b>Water Erosion Hazard</b>
Haul Road	Slight
Likely Area of Turbine Construction	Slight to Moderate
O&M Building	Slight to Severe
Rail Distribution Facility	Moderate
Laydown Area (Construction Only)	Moderate to Severe
Substation	Severe
	No Data

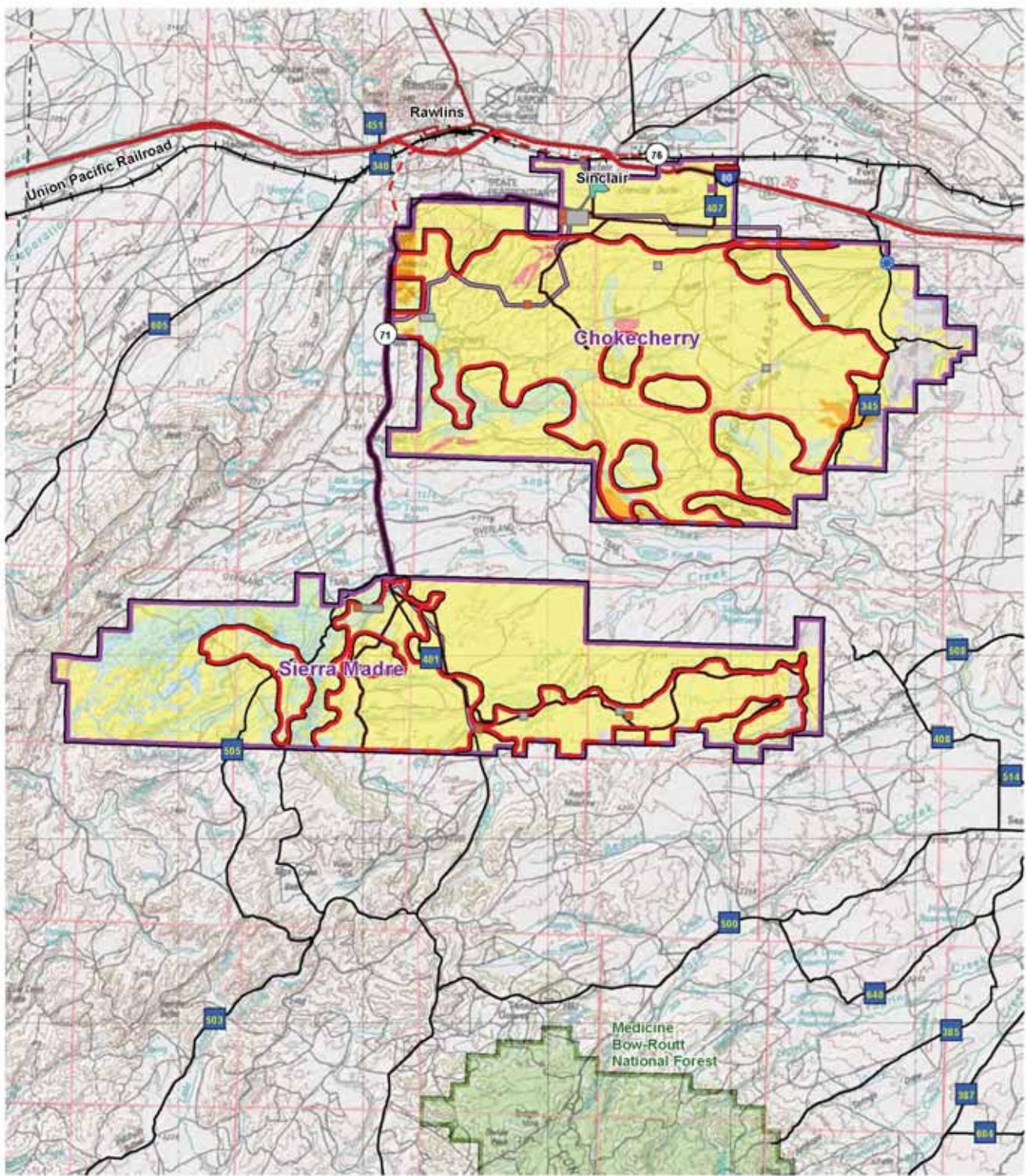
**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4.9-6**

**Water Erosion Hazard Impacts  
Associated with Alternative 2**

1:320,000

X:\05\project\12007\_001\_Wyoming\_Wind\Figures\Figure 4.9-7\_2012\Volume 4\Appendix F\Figure 4.9-7\_2012\_Arc2\_WindErosion\_20120216.mxd



**Legend**

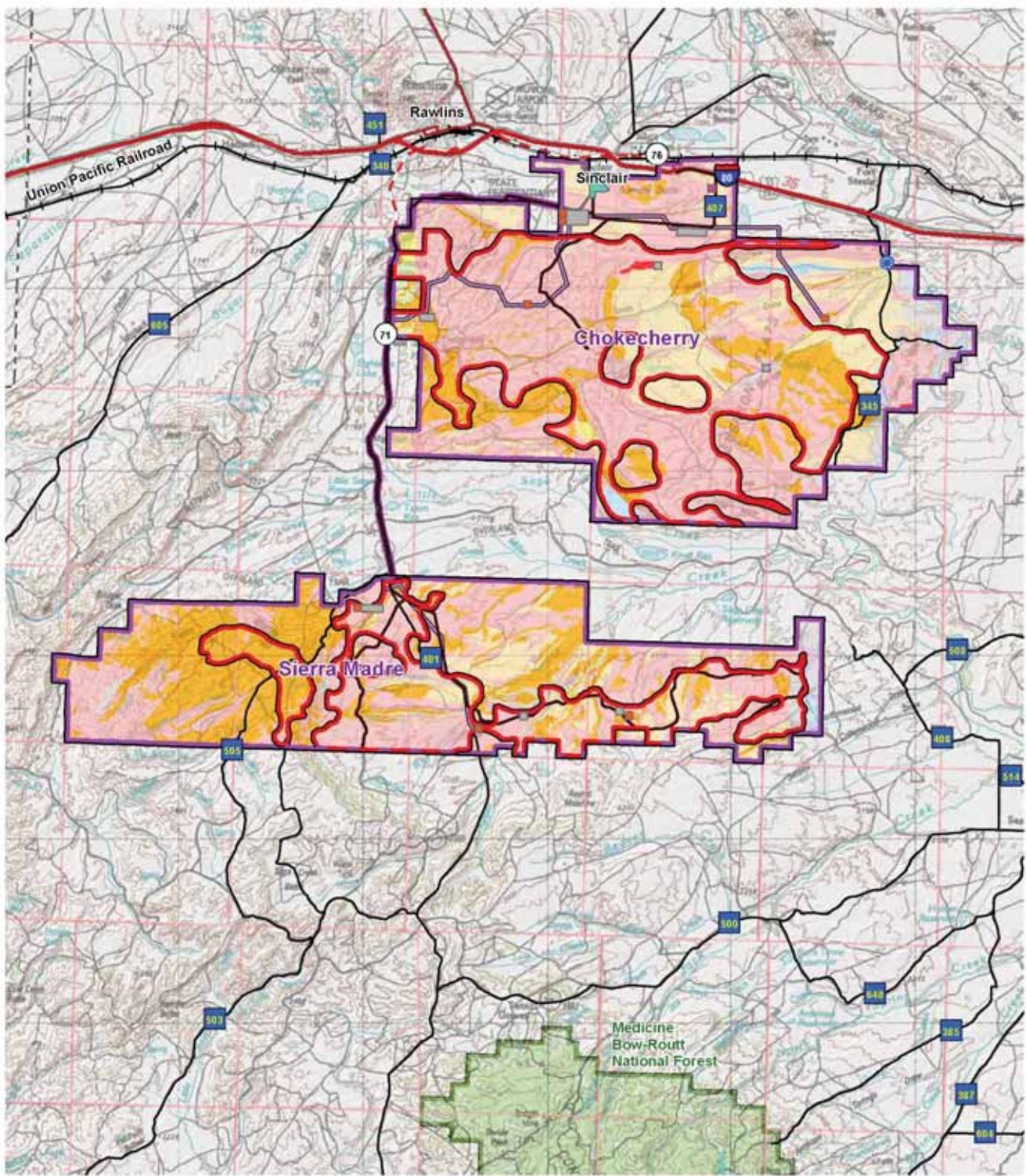
Water Extraction Site	Project Area	Transmission Line
Likely Area of Turbine Construction	O&M Building	Haul Road
O&M Building	Rail Distribution Facility	<b>Wind Erosion Hazard</b>
Laydown Area (Construction Only)	Substation	Slight
Substation		Slight to Moderate
		Moderate
		Moderate to Severe
		Severe
		No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-7**

**Wind Erosion Hazard Impacts Associated with Alternative 2**

X:\0509\project\12007\_001\_Wyoming\Wind\figures\4.9-F-8\_2012\Volume4\Appendix\Figure\_4.9-8\_Arc\_RunoffPotential\_20120116.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- Likely Area of Turbine Construction
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area

**Surface Runoff Potential**

- Very Low
- Low
- Low to Moderate
- Low to High
- Moderate
- Moderate to High
- High
- Very High
- No Data

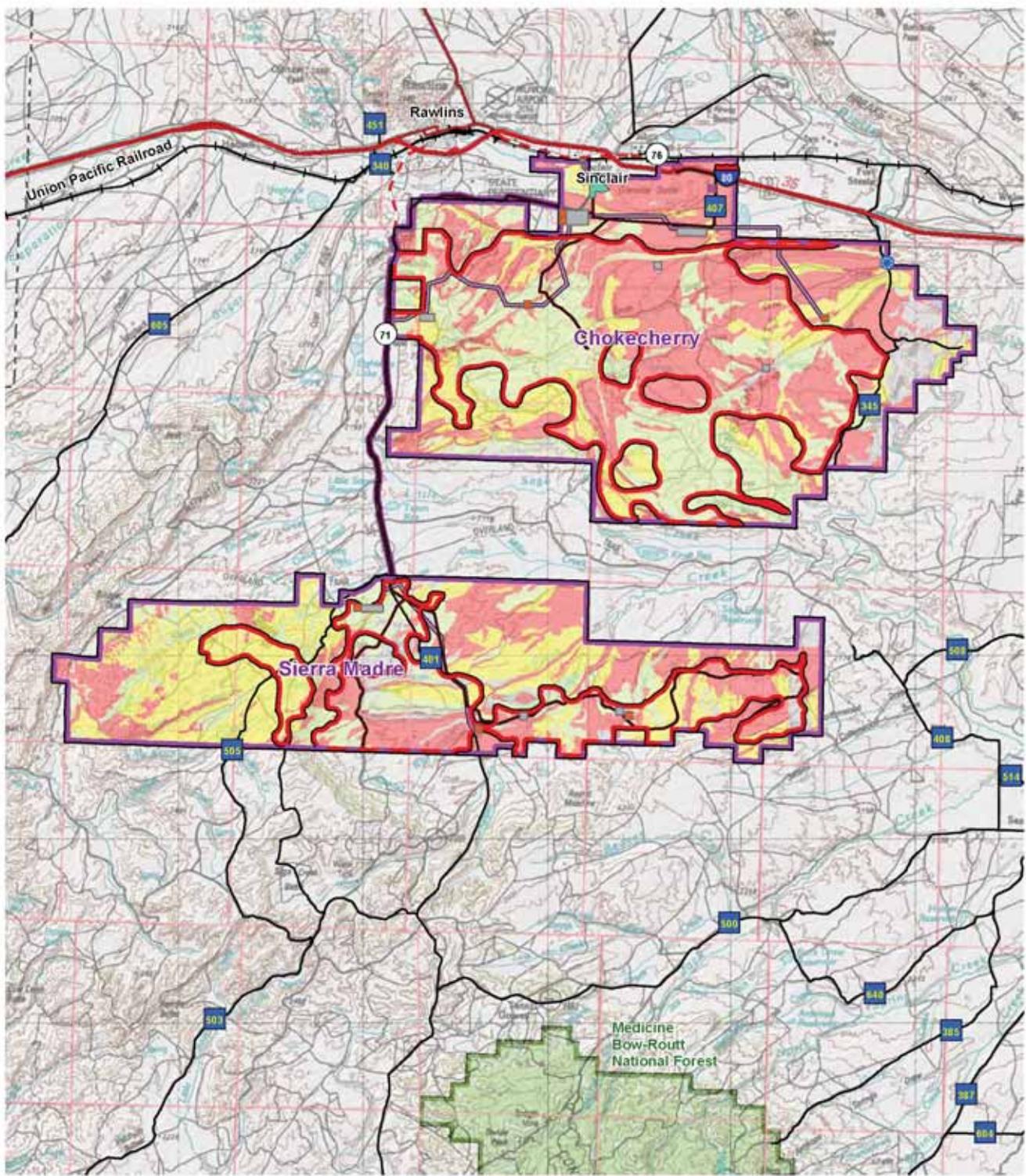
**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-8**

**Surface Runoff Potential - Impacts Associated with Alternative 2**

1:320,000

X:\06\project\12007\_001\_Wyoming\Wind\figures\4.9-F-9-2012\Volume4\Appendix\Figure\_4.9-9-02\_Arc\_TopoSoilRating\_20120215.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Topsoil Rating**

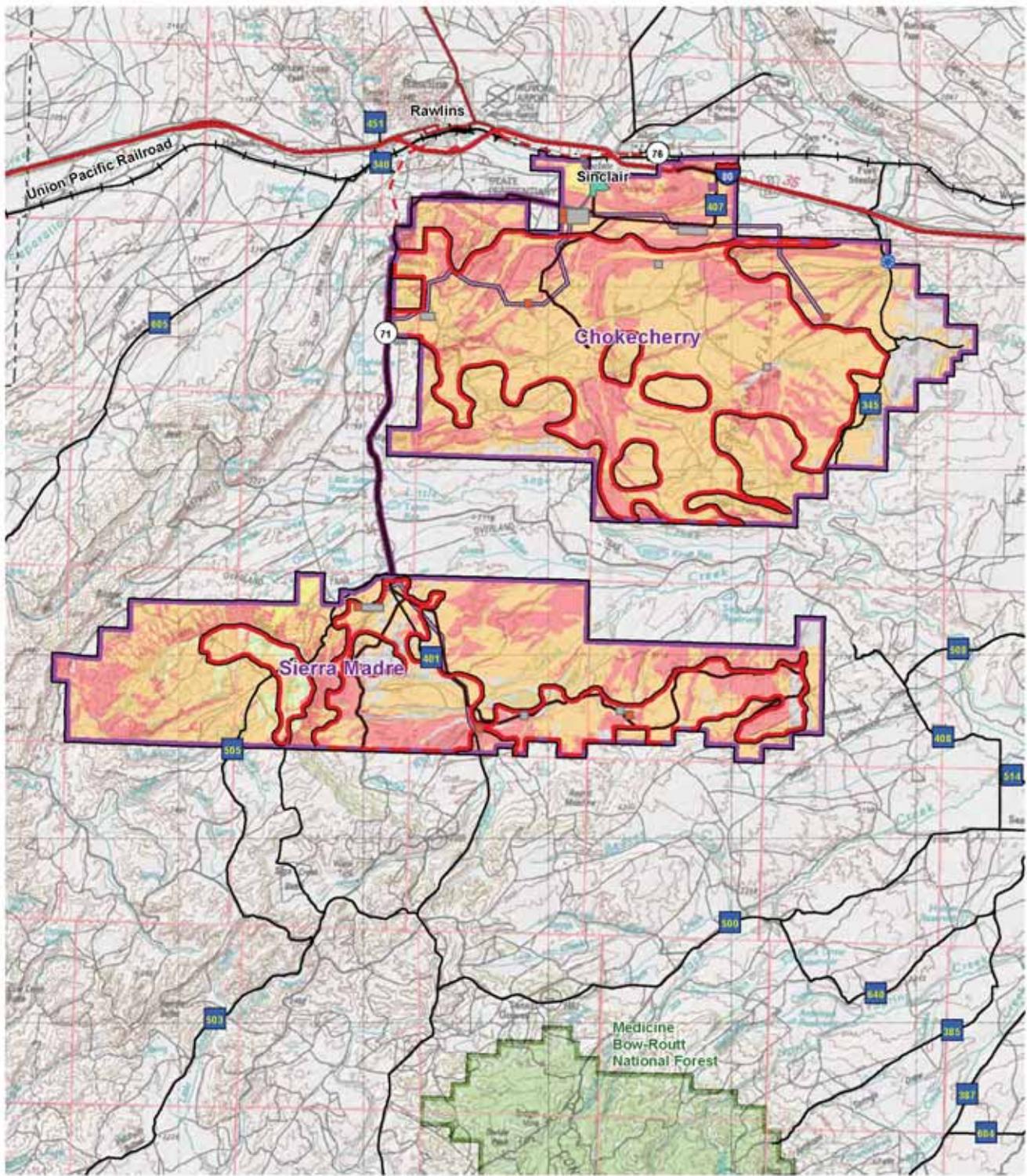
- Good
- Fair
- Poor
- No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-9**  
Impacts to Topsoils Associated with Alternative 2



X:\0509\project\12007\_001\_Wyoming\Wind\figures\4.9-F-10\_2012\Volume4\Appendix\Figure\_4.9-10\_A02\_RoadRating\_20120216.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Road Limitations**

- Slight
- Slight to Moderate
- Moderate
- Severe
- No Data

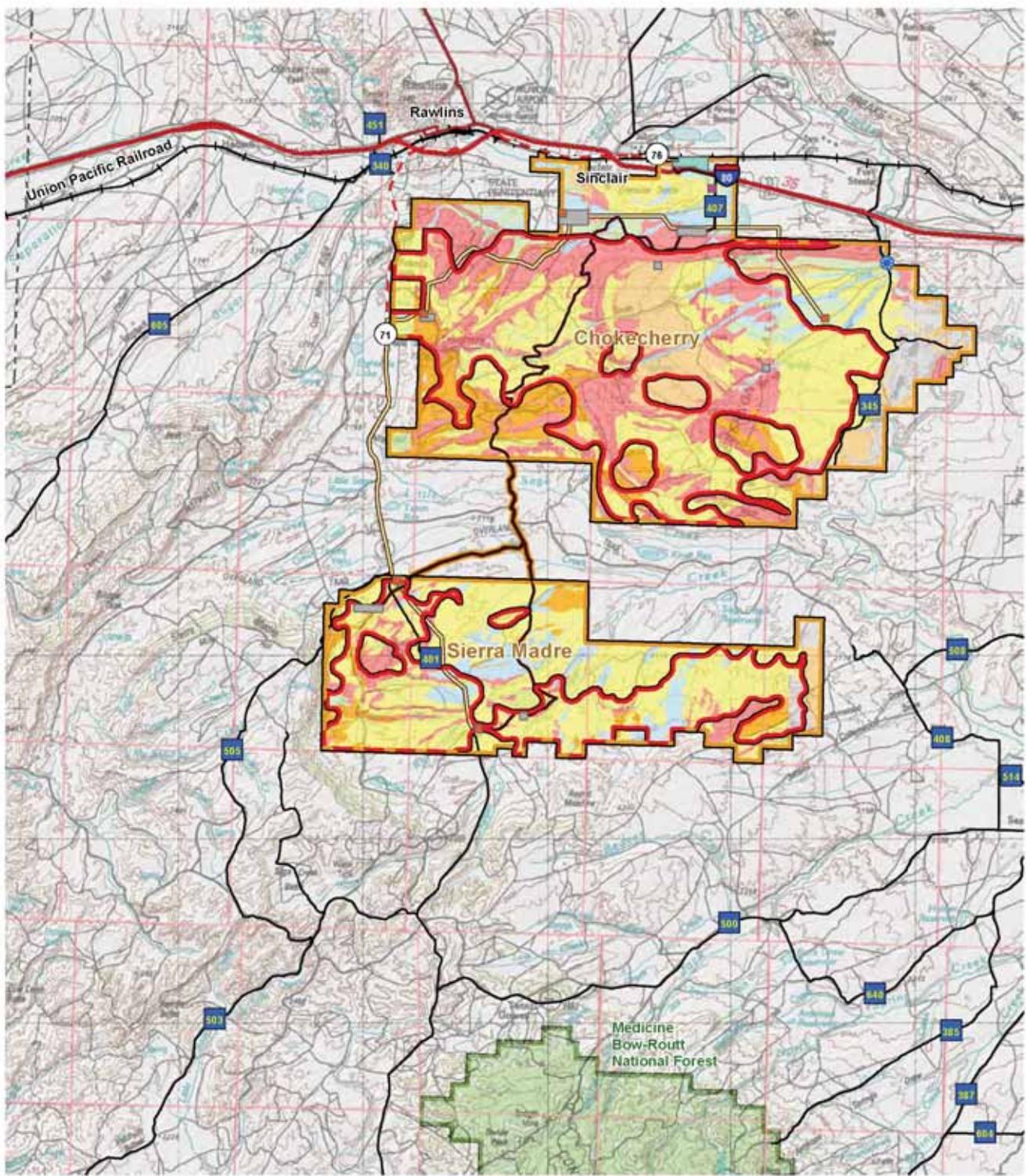
**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-10**

**Road Limitations Associated with Alternative 2**

1:320,000

X:\05\project\1207\_001\_Wyoming\_Vehic\figure\15\Fig\_15\_2012\Volume4\Appendix\Figure\_4\_09-11\_2012\_VehicErosion\_20120215.mxd



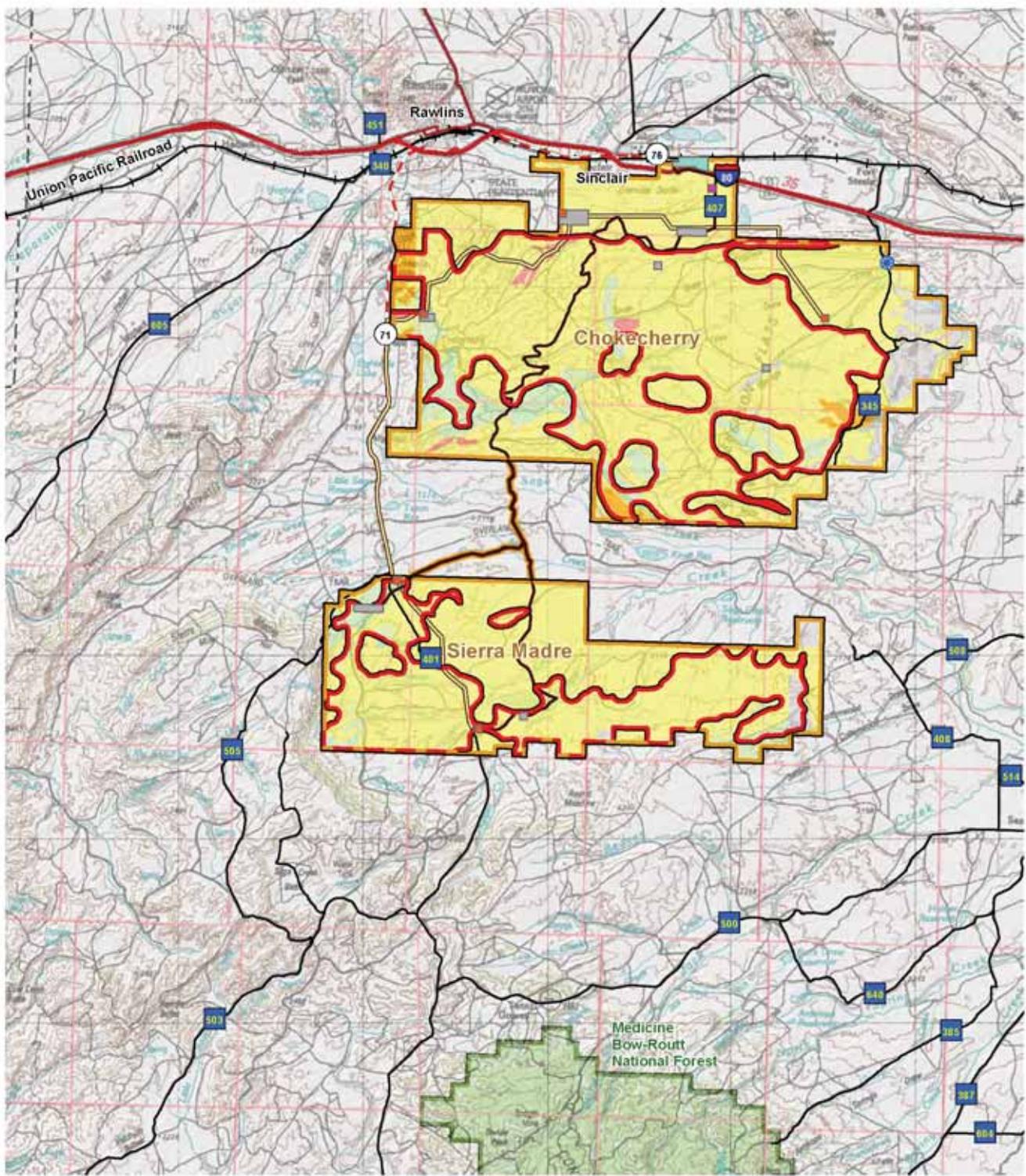
Legend	
	Water Extraction Site
	Transmission Line
	Haul Road
	Likely Area of Turbine Construction
	O&M Building
	Rail Distribution Facility
	Laydown Area (Construction Only)
	Substation
	Project Area
<b>Water Erosion Hazard</b>	
	Slight
	Slight to Moderate
	Slight to Severe
	Moderate
	Moderate to Severe
	Severe
	No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-11**

**Water Erosion Hazard Impacts Associated with Alternative 3**

X:\05\project\1207\_001\_Wyoming\_Wind\figure\4.9-F-12\_2012\Volume4\Appendix\Figure\_4.9-12\_A03\_WindErosion\_20120216.mxd



**Legend**

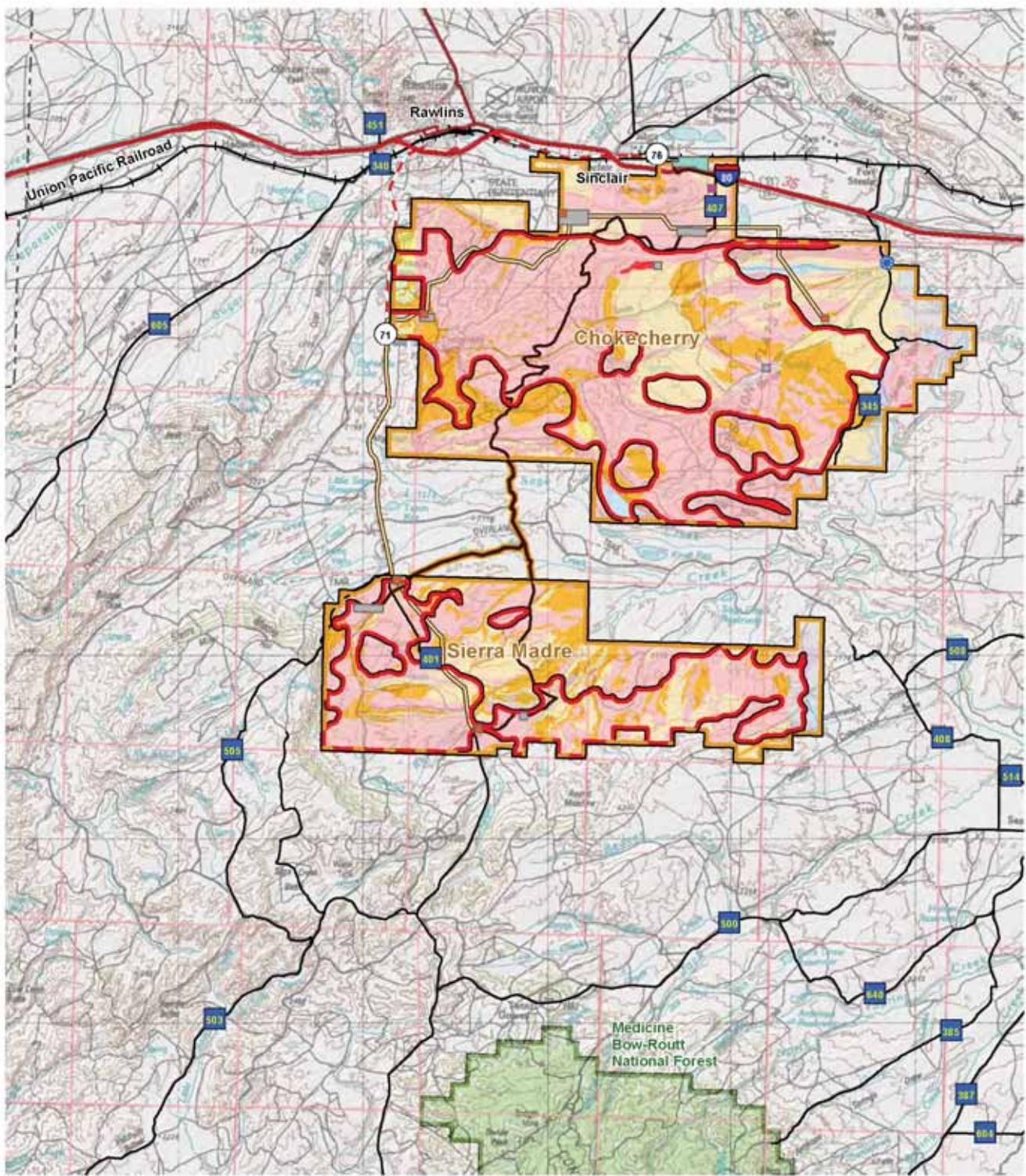
Water Extraction Site	Transmission Line
Project Area	Haul Road
Likely Area of Turbine Construction	<b>Wind Erosion Hazard</b>
O&M Building	Slight
Rail Distribution Facility	Slight to Moderate
Laydown Area (Construction Only)	Moderate
Substation	Moderate to Severe
	Severe
	No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-12**

**Wind Erosion Hazard Impacts Associated with Alternative 3**

X:\05\project\12007\_001\_Wyoming\Wind\figures\4.9-F-13\_2012\Volume4\Appendix\Figure\_4.9-13\_A03\_SurfaceRunoffPotential\_20120116.mxd



**Legend**

Water Extraction Site	Project Area
Transmission Line	<b>Surface Runoff Potential</b>
Haul Road	Very Low
Likely Area of Turbine Construction	Low
O&M Building	Low to Moderate
Rail Distribution Facility	Low to High
Laydown Area (Construction Only)	Moderate
Substation	Moderate to High
	High
	Very High
	No Data

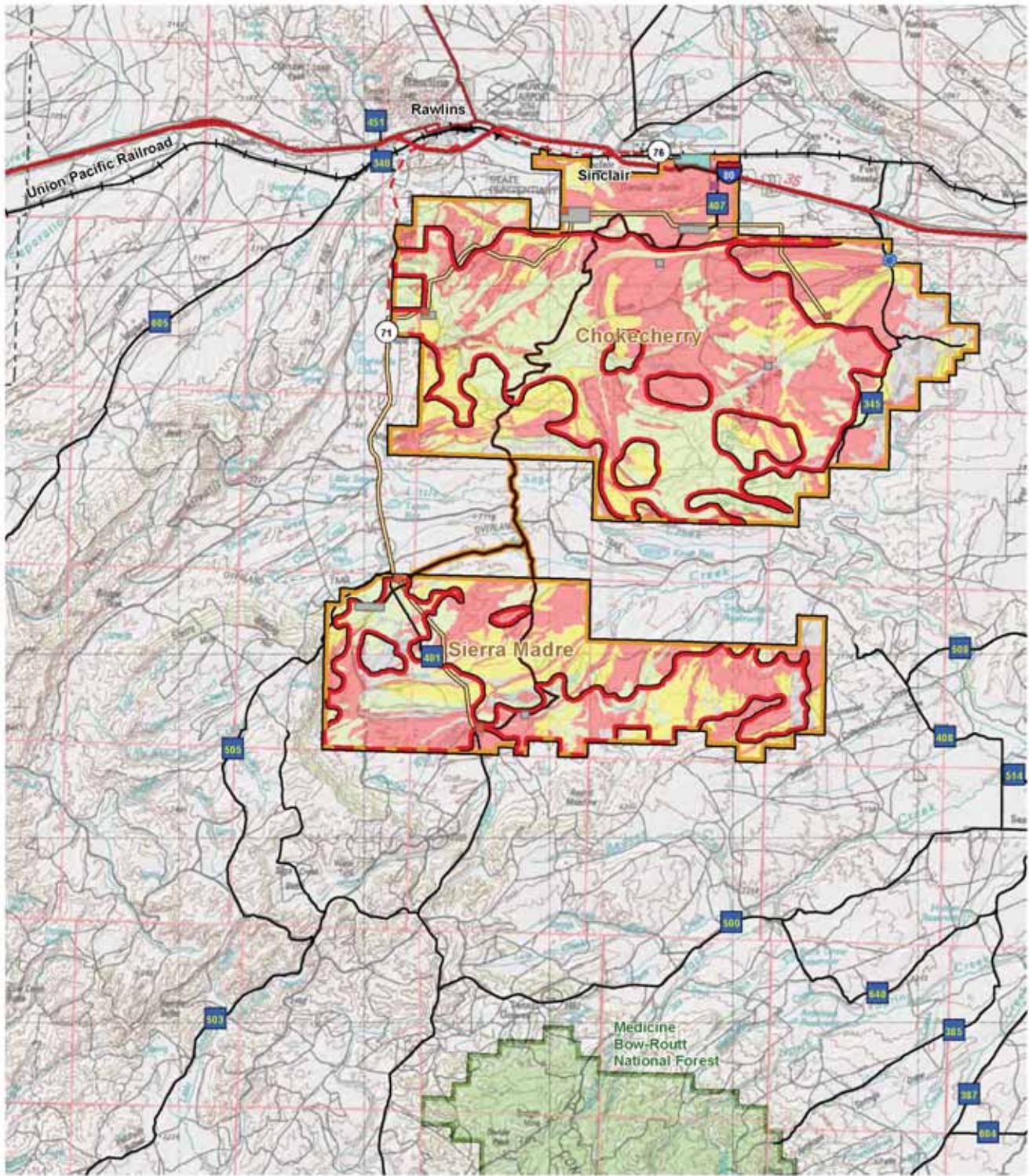
**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4.9-13**

**Surface Runoff Potential - Impacts  
Associated with Alternative 3**

1:320,000

X:\0509\geotech\12007\_001\_Wyoming\Wind\figures\4.9-F-14\_2012\Volume4\Appendix\Figure\_4.9-F-14\_A03\_TopsoilRating\_20120215.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Topsoil Rating**

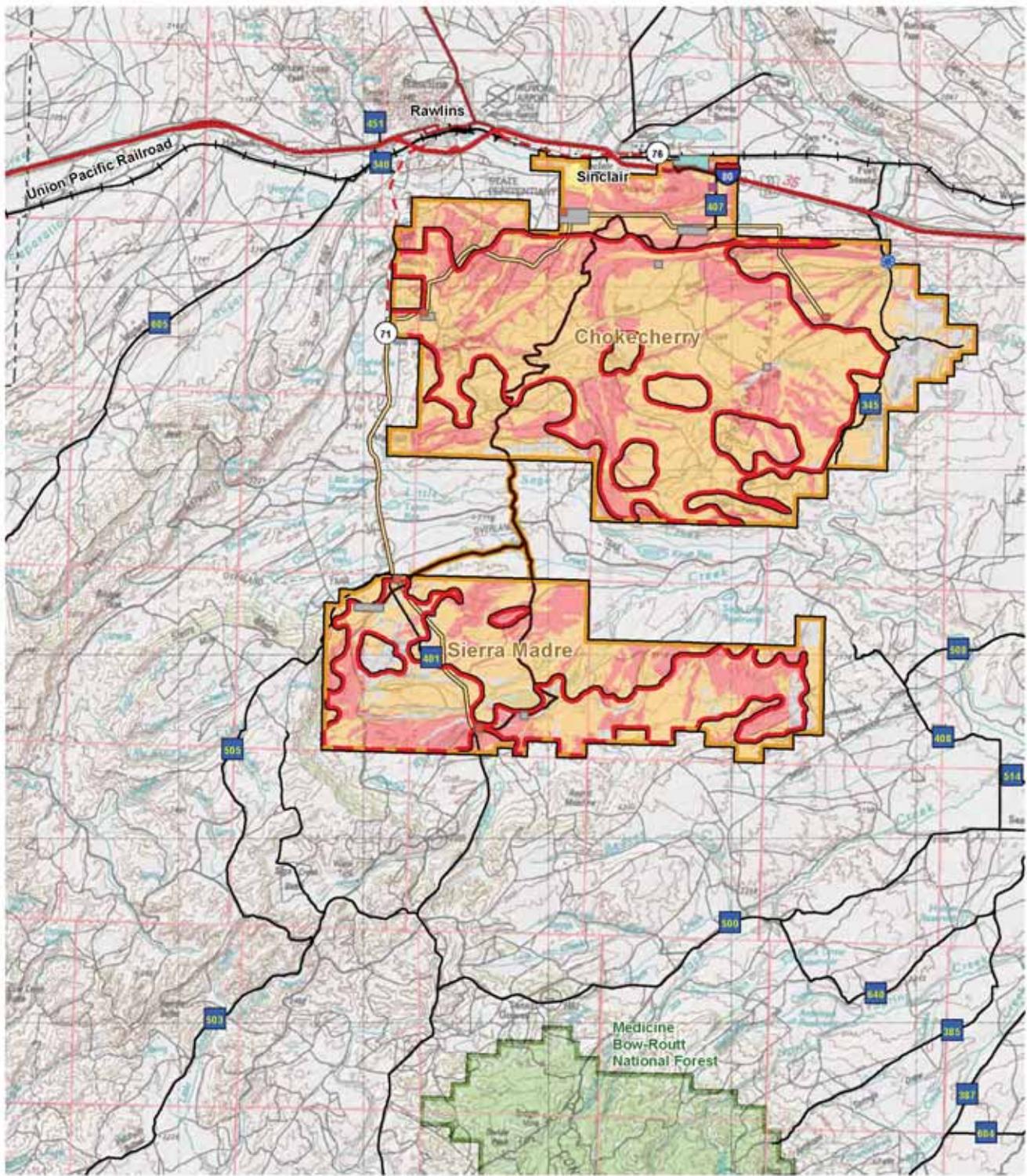
- Good
- Fair
- Poor
- No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-14**

**Impacts to Topsoils Associated with Alternative 3**

X:\05\project\1207\_001\_Wyoming\_Visualization\Figures\2012\Volume4\Appendix\Figure\_4.09-15\_A03\_RoadRating\_20120215.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Road Limitations**

- Slight
- Slight to Moderate
- Moderate
- Severe
- No Data

**Chokecherry and Sierra Madre Wind Energy Project**

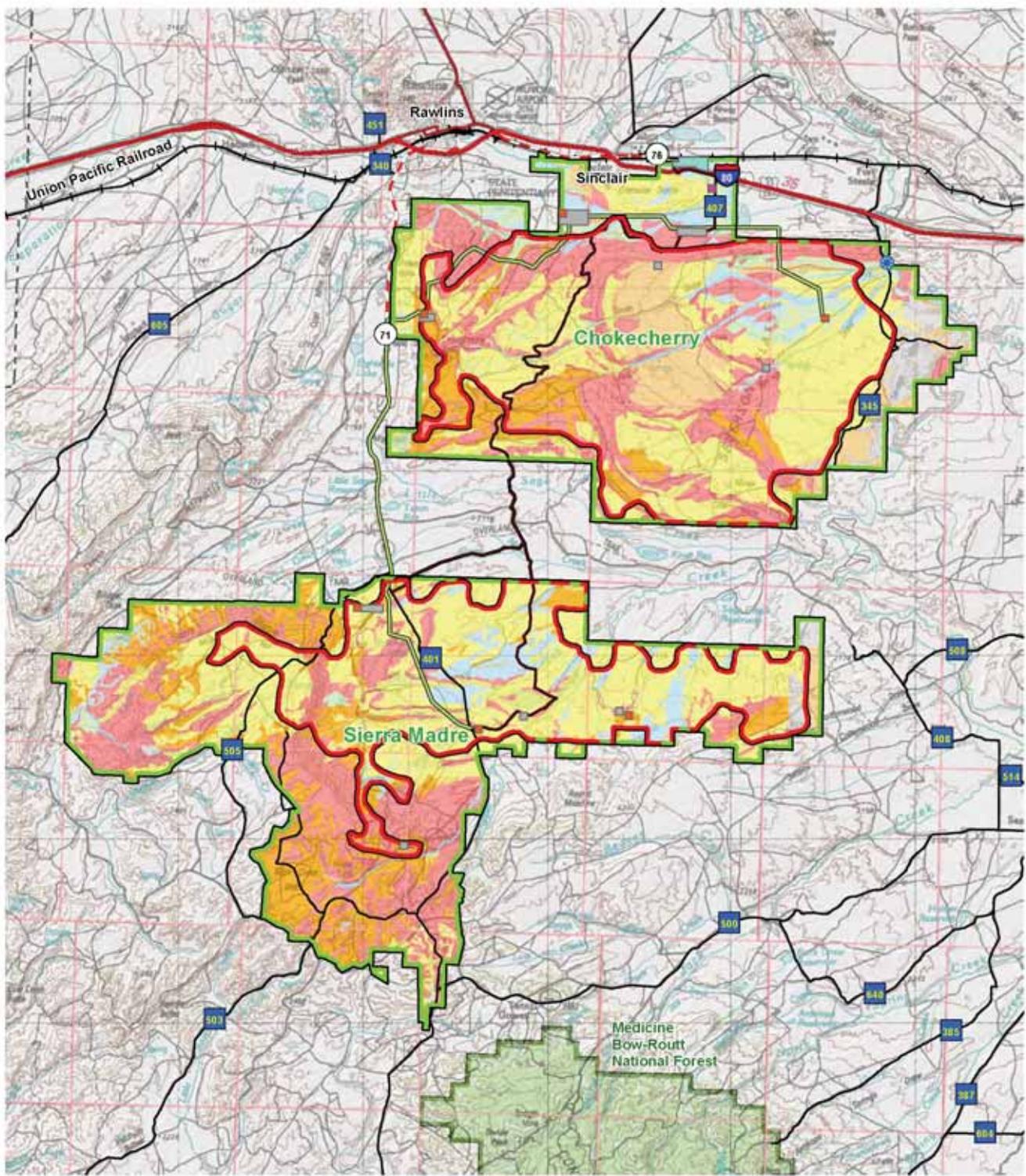
**Figure 4.9-15**

**Road Limitations Associated with Alternative 3**

0 0.5 Miles  
0 0.5 Kilometers

1:320,000

X:\05\project\1207\_001\_Wyoming\Wind\figure\15\F15\_2012\Volume\Appendix\Figure\_4\_09-16\_A4\_Volume\rosen\_20120216.mxd



**Legend**

Water Extraction Site	Project Area
Transmission Line	<b>Water Erosion Hazard</b>
Haul Road	Slight
Likely Area of Turbine Construction	Slight to Moderate
O&M Building	Slight to Severe
Rail Distribution Facility	Moderate
Laydown Area (Construction Only)	Moderate to Severe
Substation	Severe
	No Data

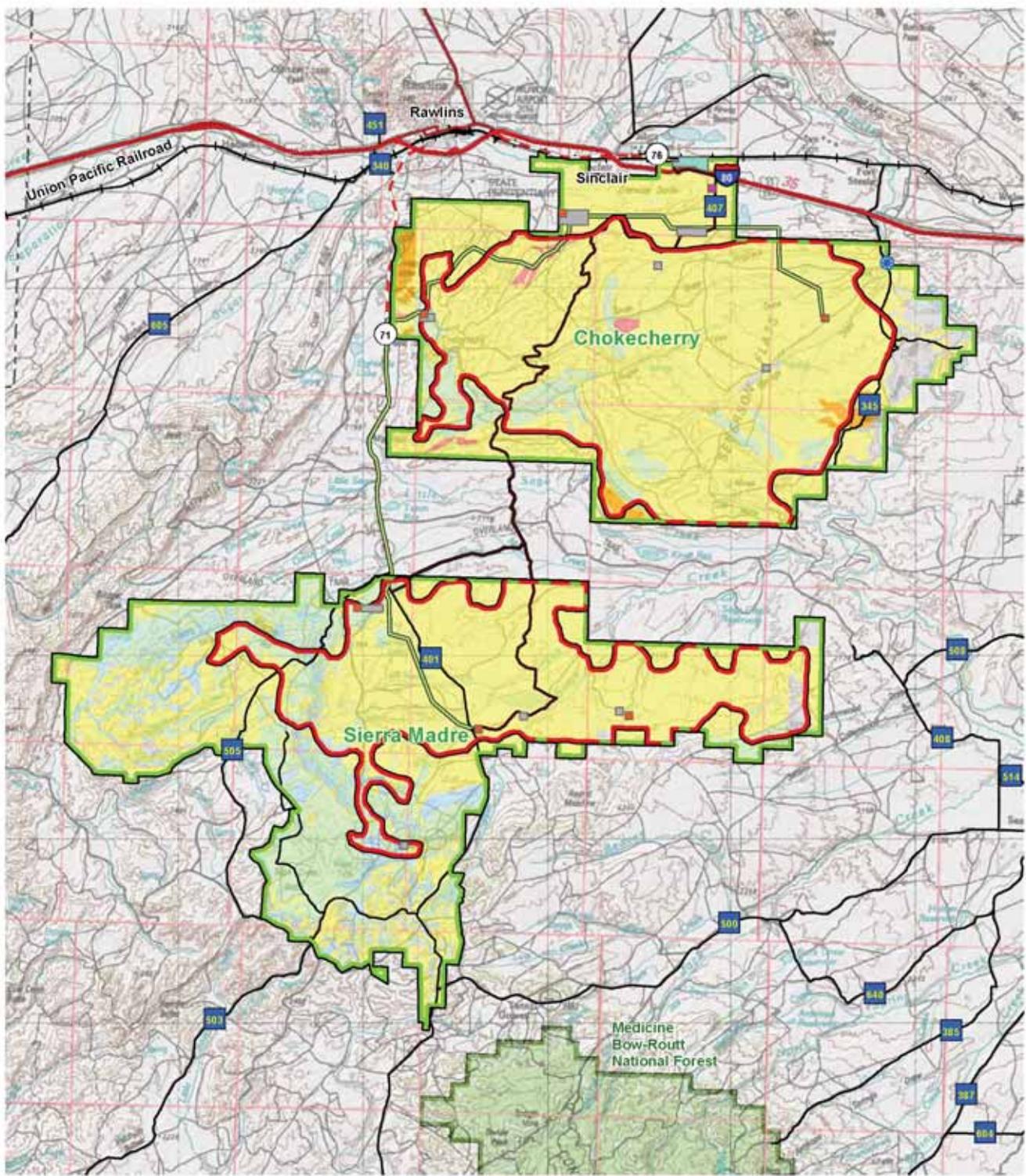
**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4.9-16**

**Water Erosion Hazard Impacts  
Associated with Alternative 4**

1:320,000

X:\05\project\12007\_001\_Wyoming\_Wind\figure\4.9-F-17-2012\Volume4\Appendix\Figure\_4.9-17\_Area4\_WindErosion\_20120216.mxd



**Legend**

Water Extraction Site	Transmission Line
Project Area	Haul Road
Likely Area of Turbine Construction	<b>Wind Erosion Hazard</b>
O&M Building	Slight
Rail Distribution Facility	Slight to Moderate
Laydown Area (Construction Only)	Moderate
Substation	Moderate to Severe
	Severe
	No Data

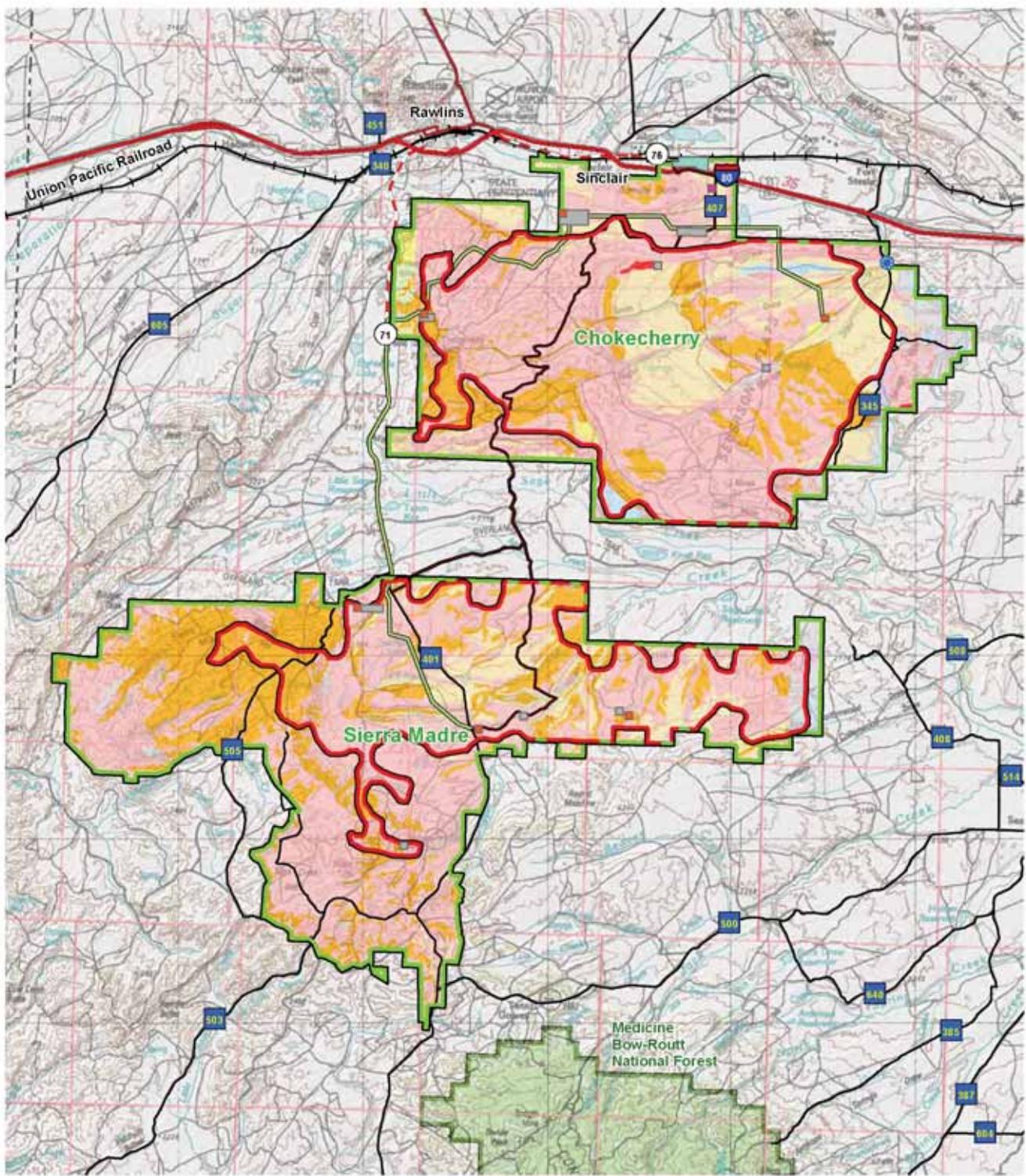
**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-17**

**Wind Erosion Hazard Impacts Associated with Alternative 4**

1:320,000

X:\05\project\1207\_001\_Wyoming\Wind\figures\4.9-F-18\_2012\Volume4\Appendix\Figure\_4.9-18\_Area\_RunoffPotential\_20120116.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- Likely Area of Turbine Construction
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area

**Surface Runoff Potential**

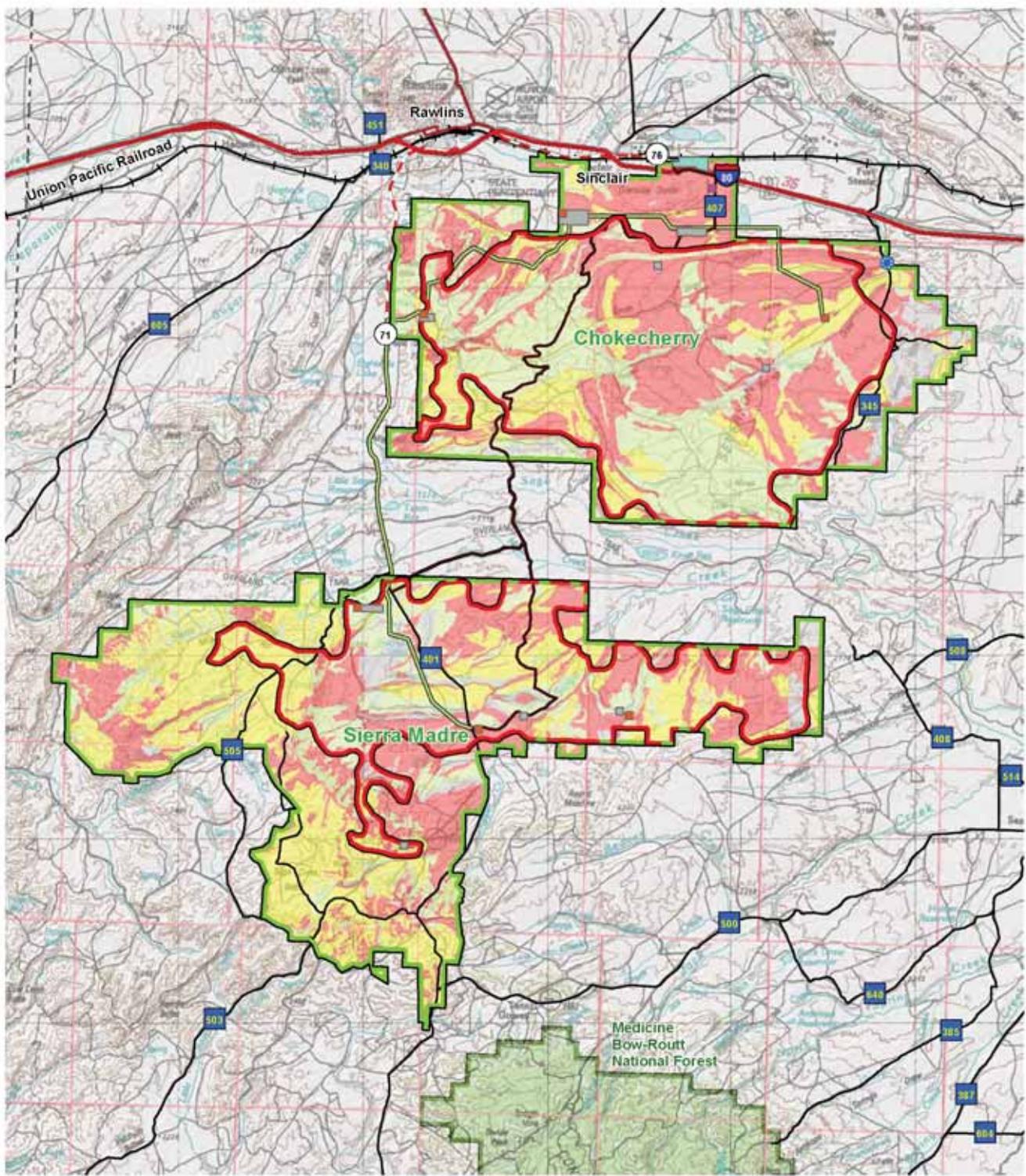
- Very Low
- Low
- Low to Moderate
- Low to High
- Moderate
- Moderate to High
- High
- Very High
- No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-18**

**Surface Runoff Potential - Impacts Associated with Alternative 4**

X:\06\project\2007\_001\_Wyoming\Wind\figures\4.9-F-19\_2012\Volume4\Appendix\Figure\_4.9-19\_Area\_TopsoilRating\_20120215.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Topsoil Rating**

- Good
- Fair
- Poor
- No Data

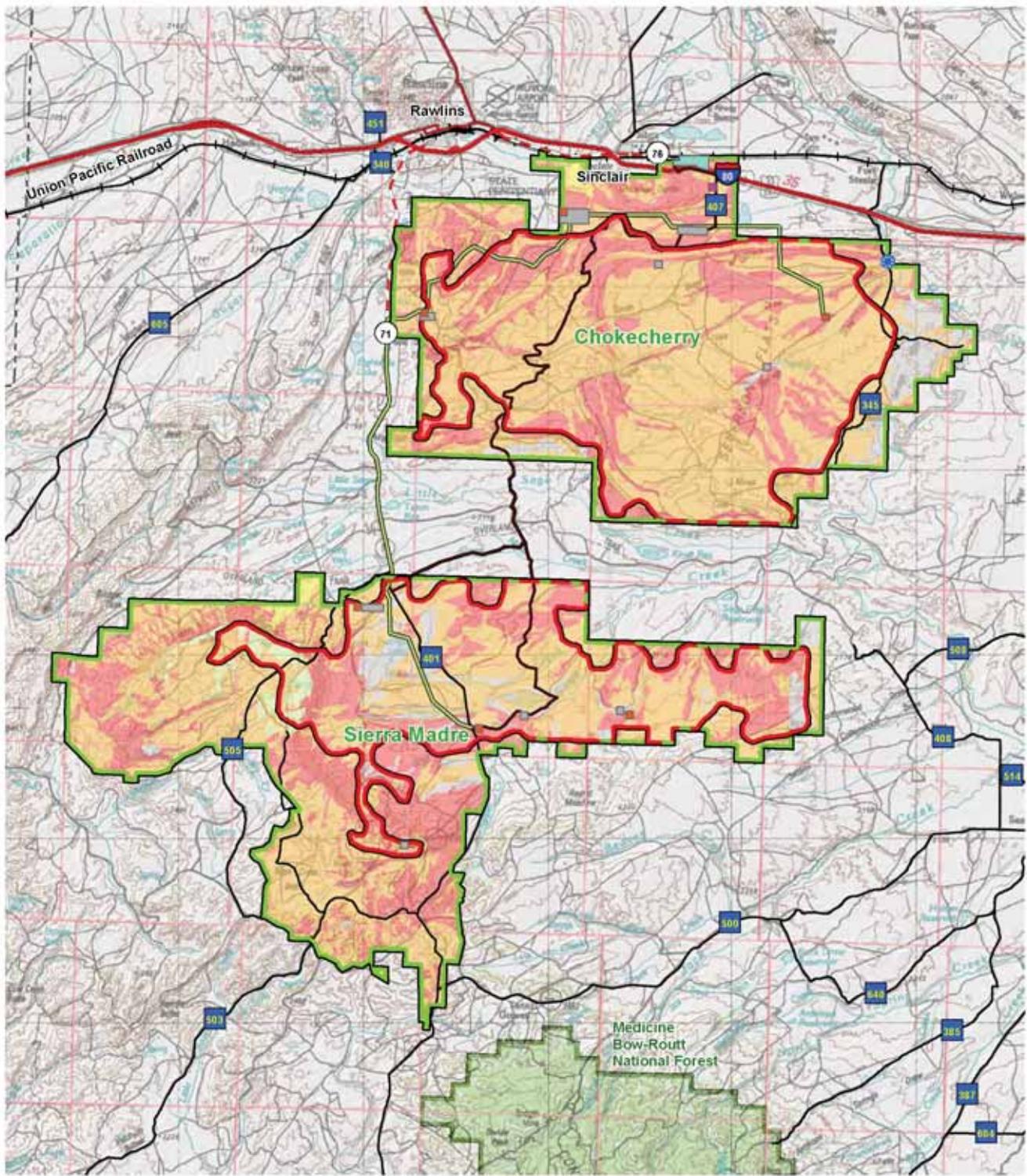
**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-19**

**Impacts to Topsoils Associated with Alternative 4**

1:320,000

X:\05\project\12007\_001\_Wyoming\Wind\figures\4.9-F-15\_2012\Volume4\Appendix\Figure\_4.9-20\_A4\_RoadRating\_20120215.mxd



**Legend**

- Water Extraction Site
- Transmission Line
- Haul Road
- O&M Building
- Rail Distribution Facility
- Laydown Area (Construction Only)
- Substation
- Project Area
- Likely Area of Turbine Construction

**Road Limitations**

- Slight
- Slight to Moderate
- Moderate
- Severe
- No Data

**Chokecherry and Sierra Madre Wind Energy Project**

**Figure 4.9-20**

**Road Limitations Associated with Alternative 4**

Scale: 1:320,000



**Legend**

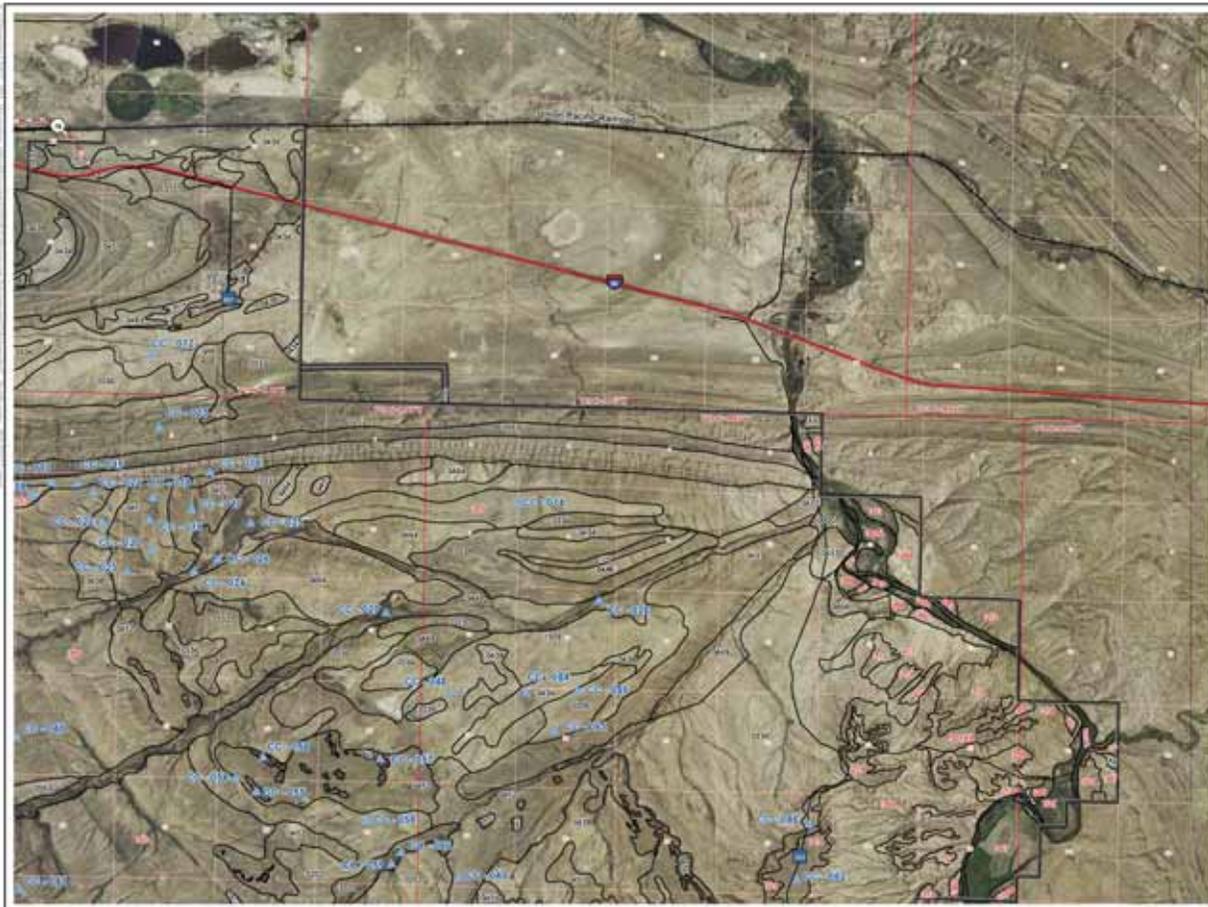
- City or Town
- ▲ Soil Constraint
- Interstate Highway
- U.S. Highway
- - - State Highway
- County Road
- Railroad
- Abandoned Railroad
- ▭ Application Area
- ▭ Soil Map Unit (BLM)
- ▭ Soil Map Unit (NRCS)
- ▭ Township
- ▭ Section



Chokecherry and Sierra Madre Wind Energy Project

Figure 1

Chokecherry and Sierra Madre Soil Survey



**Legend**

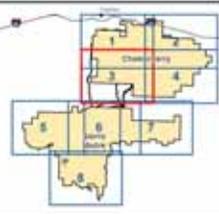
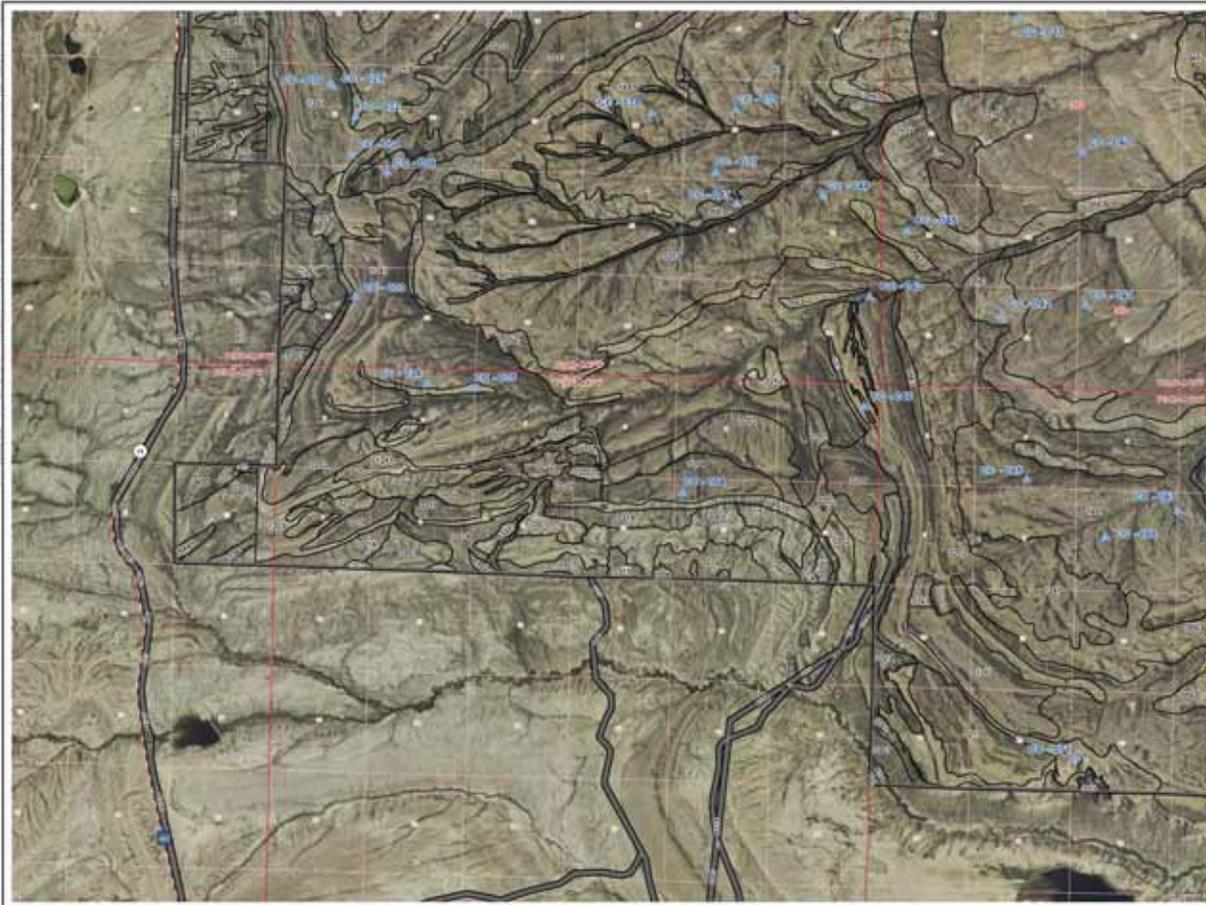
- City or Town
- ▲ Soil Constraint
- Interstate Highway
- U.S. Highway
- - - State Highway
- County Road
- Railroad
- Abandoned Railroad
- ▭ Application Area
- ▨ Soil Map Unit (BLM)
- Soil Map Unit (NRCS)
- Township
- Section



**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 2**

**Chokecherry and Sierra Madre  
Soil Survey**



**Legend**

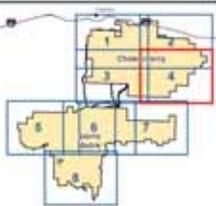
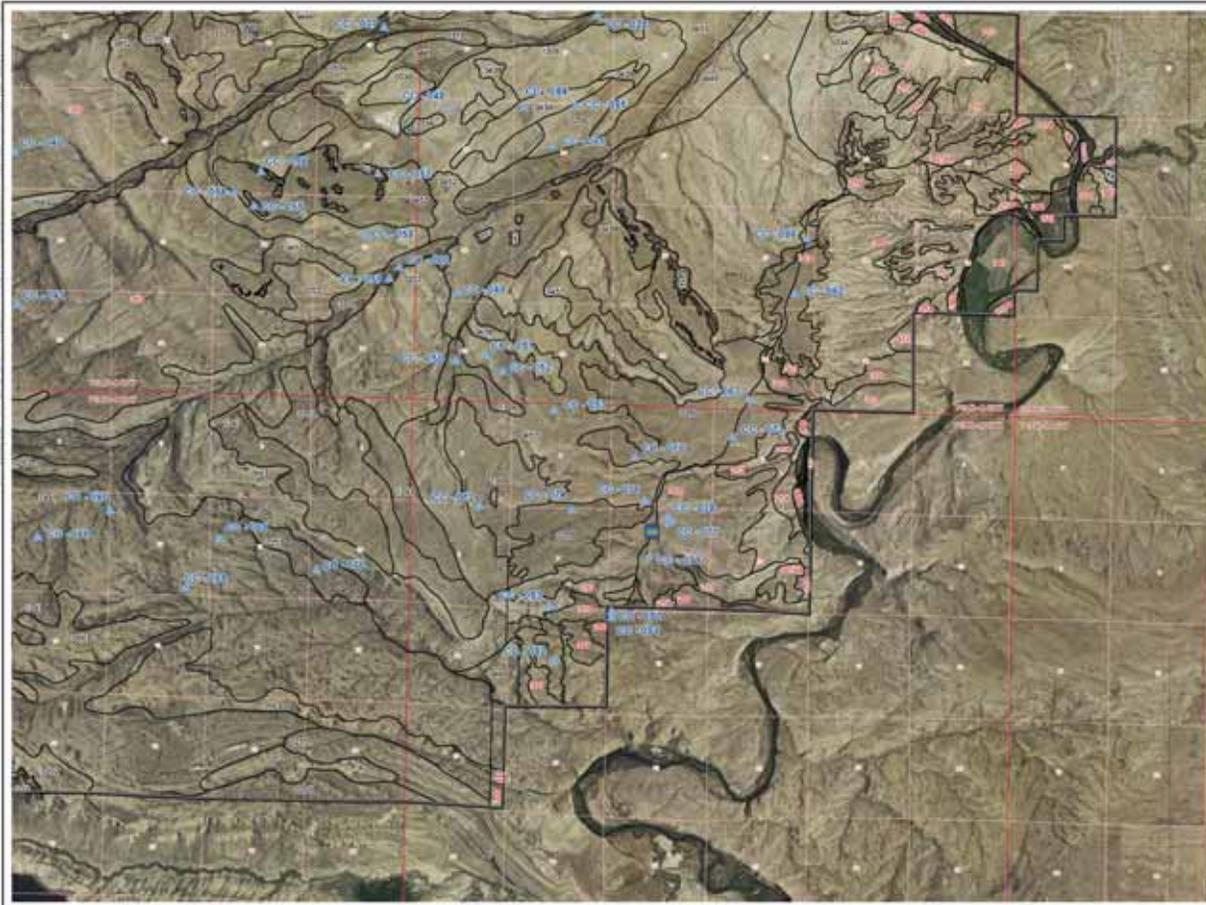
- City or Town
- ▲ Soil Constraint
- Interstate Highway
- U.S. Highway
- - - State Highway
- County Road
- Railroad
- Abandoned Railroad
- ▭ Application Area
- ▭ Soil Map Unit (BLM)
- ▭ Soil Map Unit (NRCS)
- ▭ Township
- ▭ Section



Chokecherry and Sierra Madre  
Wind Energy Project

Figure 3

Chokecherry and Sierra Madre  
Soil Survey



**Legend**

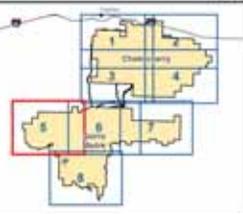
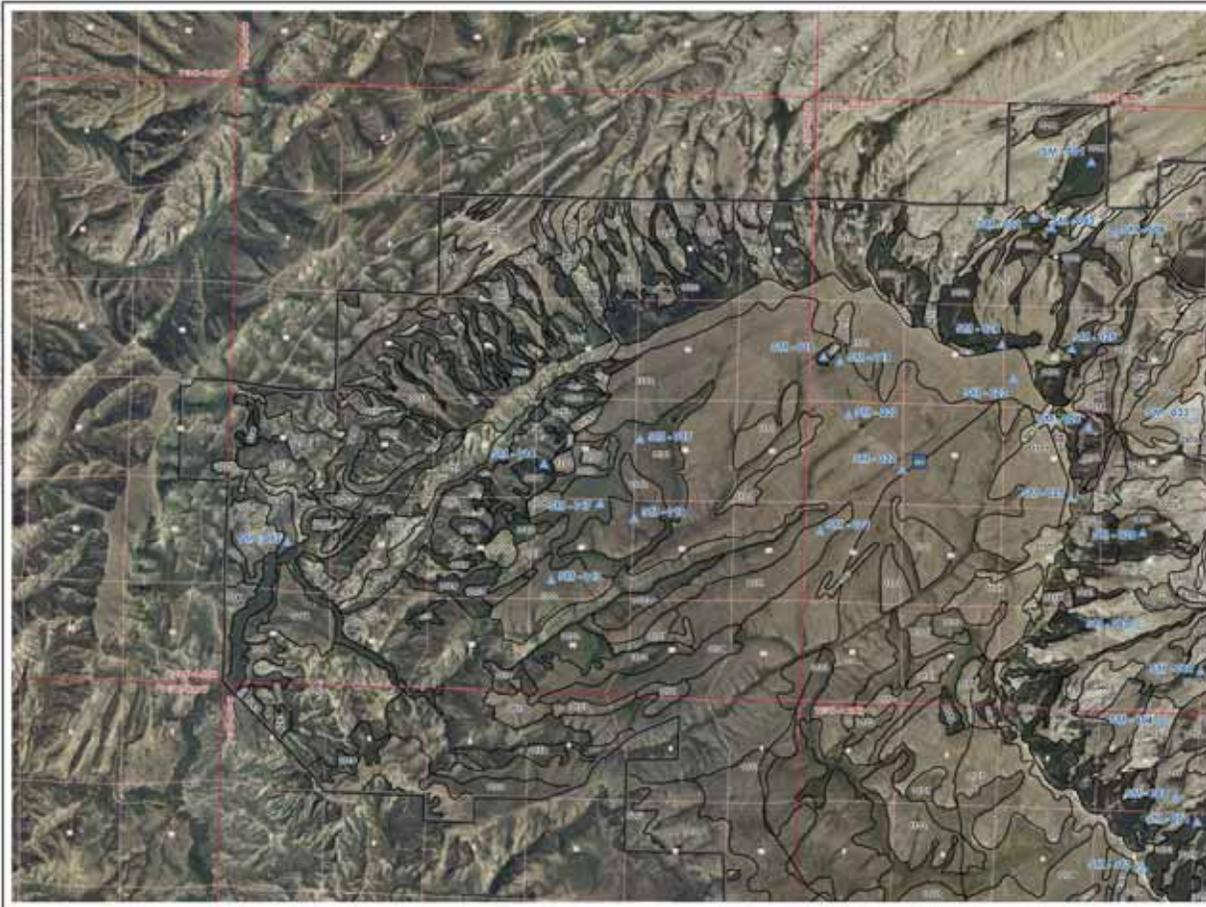
- City or Town
- ▲ Soil Constraint
- Interstate Highway
- U.S. Highway
- - - State Highway
- County Road
- Railroad
- Abandoned Railroad
- ▭ Application Area
- ▭ Soil Map Unit (BLM)
- ▭ Soil Map Unit (NRCS)
- ▭ Township
- ▭ Section



**Chokecherry and Sierra Madre  
Wind Energy Project**

**Figure 4**

**Chokecherry and Sierra Madre  
Soil Survey**

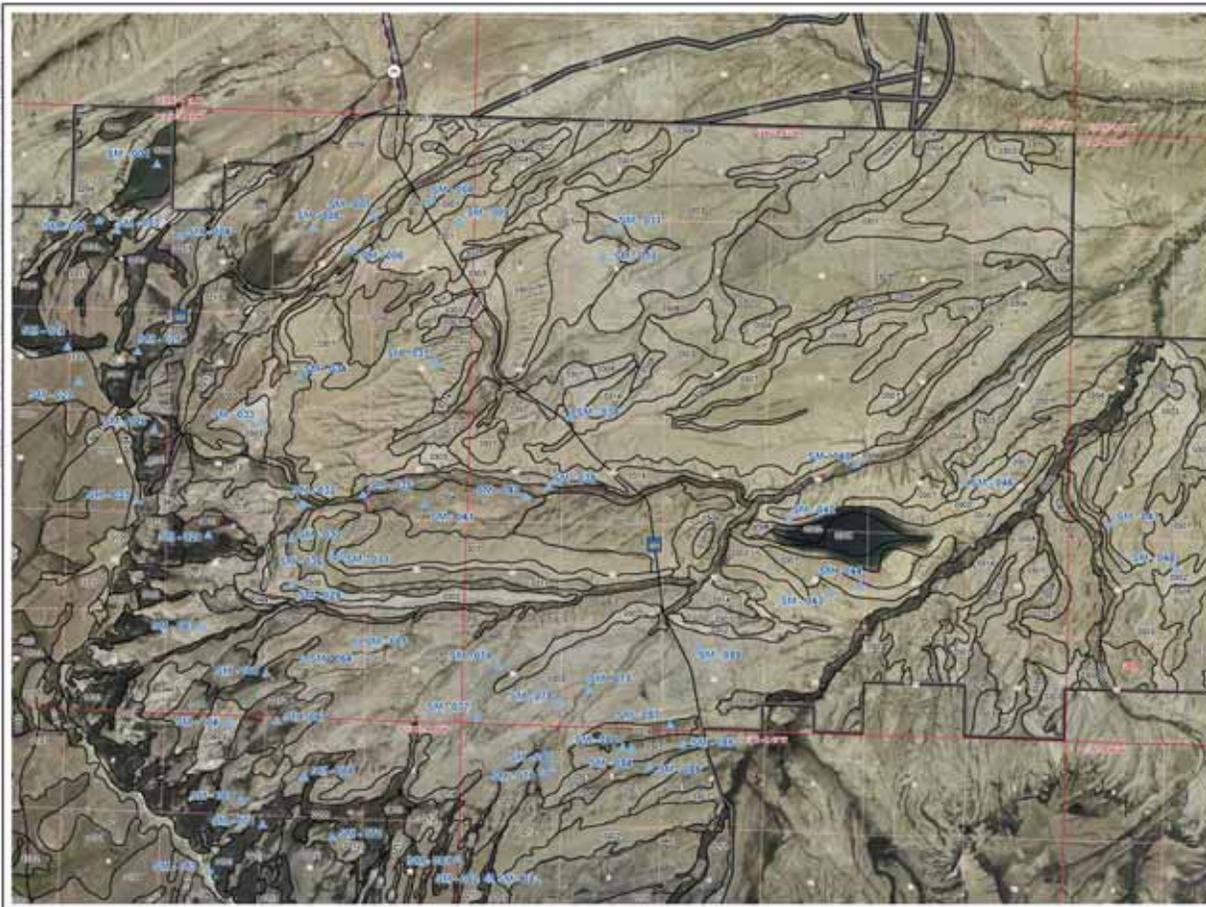


- Legend**
- City or Town
  - ▲ Soil Constraint
  - Interstate Highway
  - U.S. Highway
  - - - State Highway
  - County Road
  - Railroad
  - + + + Abandoned Railroad
  - ▭ Application Area
  - ▨ Soil Map Unit (BLM)
  - ▨ Soil Map Unit (NRCS)
  - ▭ Township
  - ▭ Section



Chokecherry and Sierra Madre  
Wind Energy Project

**Figure 5**  
Chokecherry and Sierra Madre  
Soil Survey



**Legend**

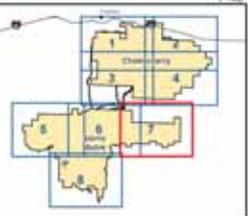
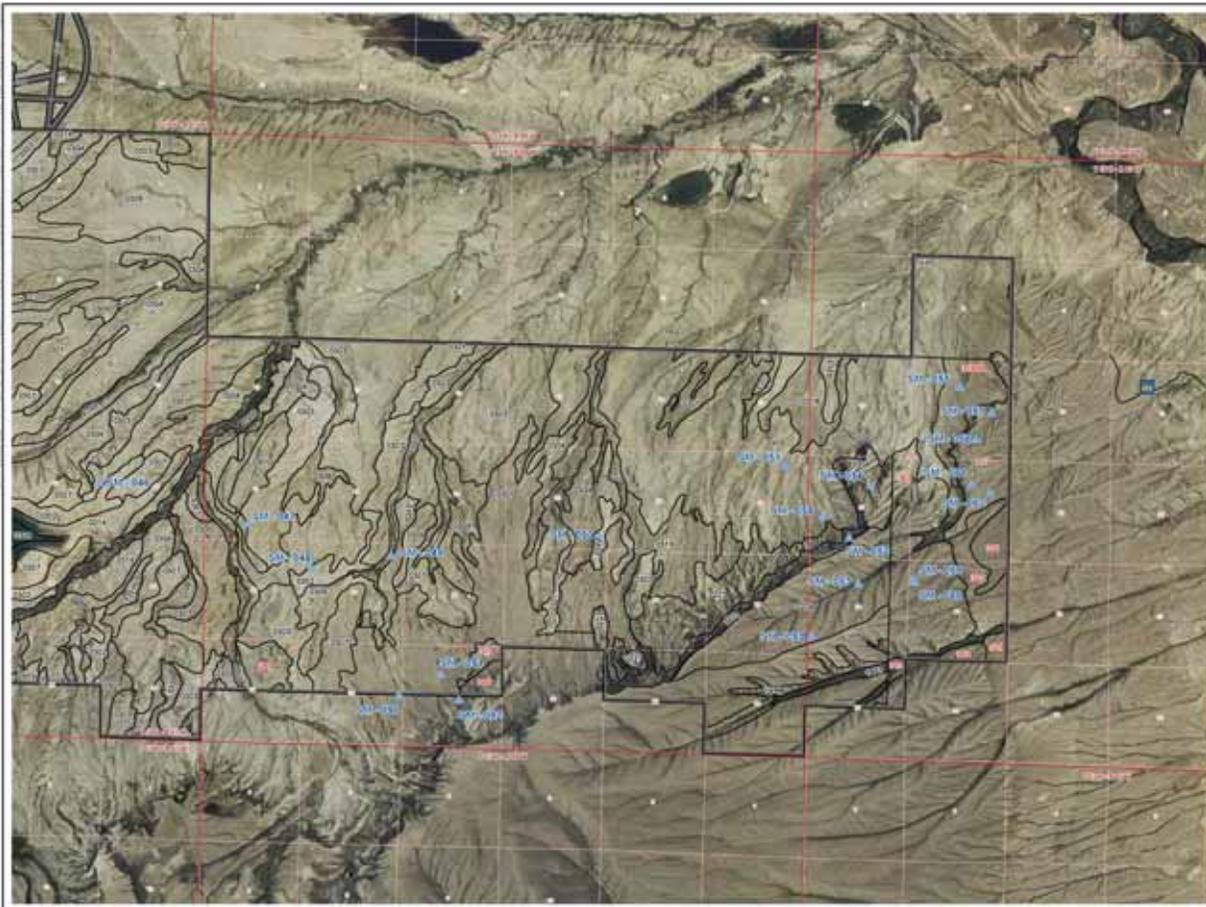
- City or Town
- ▲ Soil Constraint
- Interstate Highway
- U.S. Highway
- - - State Highway
- County Road
- Railroad
- Abandoned Railroad
- ▭ Application Area
- ▭ Soil Map Unit (BLM)
- ▭ Soil Map Unit (NRCS)
- ▭ Township
- ▭ Section



Chokecherry and Sierra Madre  
Wind Energy Project

Figure 6

Chokecherry and Sierra Madre  
Soil Survey



**Legend**

- City or Town
- ▲ Soil Constraint
- Interstate Highway
- U.S. Highway
- - - State Highway
- County Road
- Railroad
- Abandoned Railroad
- ▭ Application Area
- ▭ Soil Map Unit (BLM)
- ▭ Soil Map Unit (NRCS)
- ▭ Township
- ▭ Section



Chokecherry and Sierra Madre  
Wind Energy Project

Figure 7

Chokecherry and Sierra Madre  
Soil Survey

