

### 3.9 Land Use and Recreation

Issues associated with land use and recreation include changes to, and conflicts with, existing land uses in and near the Rusk Permit Area, the potential for the proposed project to restrict Tatum's growth to the north, and potential effects to environmental resources associated with recreation areas and opportunities.

The study area for land use encompasses the area within the proposed permit boundary and the immediate area within 2 miles of the permit boundary. The study area for recreation encompasses the area within the proposed permit boundary and the area within 5 miles of the permit boundary. The 2-mile land use perimeter was selected as the likely limit for potential mine-related direct and indirect land use conflicts. The larger recreation study area was based on the potential for mine-related effects on hunting and fishing activities, plus the potential for changes in recreation demand from project-related employment changes. The cumulative effects study areas for land use and recreation are essentially the same as the direct/indirect effects study areas, although it is possible that future activities outside the study area may affect the study area in a cumulative manner. If project-related actions and reasonably foreseeable future actions (see Section 2.7) result in substantial population changes, recreation resources beyond the defined study area may be affected and have been considered.

#### 3.9.1 Affected Environment

##### 3.9.1.1 Land Use

The proposed permit boundary encompasses approximately 20,377 acres. SWEPCO owns approximately 5 percent and controls an additional 45 percent of the land within the permit boundary through leases. Most of the remainder of the land within the permit boundary is in smaller private ownership parcels that would be purchased or leased by SWEPCO. Existing land uses in the study area are shown in **Figure 3.9-1**.

The study area is located in East Texas in an area known for an abundance of lignite, a low grade coal that spans from the Texas-Louisiana border to the Mexico border near Laredo, Texas, 600 miles to the southwest. Lignite mining is a common land use in Texas' lignite belt. There are several lignite mines located in East Texas, four of which are near the Rusk Permit Area (see **Figure 2-12**). The Rusk Permit Area is a proposed expansion of the existing South Hallsville No. 1 Mine, which is located north of the Sabine River and adjacent to the northeastern portion of the proposed Rusk Permit Area boundary. The Martin Lake Mine complex is south and east of the permit boundary, primarily in Panola County. The Oak Hill Mine is in Rusk County, approximately 11 miles southwest of Tatum. The Darco Mine, located approximately 1 mile northeast of the Rusk Permit Area, immediately adjacent to the South Hallsville No. 1 Mine, is a small mine in the process of reclamation and closure.

The land use study area is located in unincorporated portions of Rusk, Panola, and Harrison counties. The study area is not covered by local comprehensive land use plans or zoning regulations.

The study area is in the Pineywoods vegetation region and consists of upland and floodplain hardwood forests, with areas of dispersed pasture land and pine plantations (see Section 3.4, Vegetation). Current land uses include forestry, pasture land, industrial/commercial facilities, developed water resources, and residential areas. Most of the area is rural in character and only sparsely developed. There are approximately 609 structures, habitable and non-habitable, within the study area, most of which are located in Mine Area X west of Tatum. Approximately 469 of the structures are residences, 21 of which are in Mine Area V, 85 are in Mine Area W, and 150 are in Mine Area X. An additional 213 residences are in the buffer areas within the Rusk Permit Area boundary, but outside the planned disturbance areas (HDR 2010d). There is a small amount of non-agricultural commercial or industrial development in the study area, consisting mainly of lignite mining, utility corridors for pipelines and major electric transmission lines, and oil and gas drilling pads and well sites. Other land uses in the proposed Rusk Permit Area include 2 churches and a cemetery within 1 mile of each other on CR 2210. There also are schools, cemeteries, and small retail facilities in the study area, but outside the proposed permit boundary. The

nearest school is the Tatum Middle School in north Tatum, approximately 1,000 feet from the permit boundary. The satellite photo presented in **Figure 3.9-2** shows the generally rural nature of the study area.

Existing land uses in the study area, including lands within the proposed permit boundary and buffer area, are presented in **Table 3.9-1**. The land use classifications in the table and in **Figure 3.9-1** are as defined by the RCT. The forestry classification is defined as land used or managed for the long-term production of wood, wood fiber, or wood-derived products, or used in the support of forest harvest and management operations. The forestry classification has been combined with acreages of fish and wildlife habitat in order to simplify the land use classification. Fish and wildlife habitat is defined as land that is wholly or partially dedicated to the protection or management of fish or wildlife. Pasture land is defined as land used primarily for the long-term production of adapted, domesticated forage plants to be grazed or cut for livestock feed. Pasture land is differentiated from grazing land by the dominant plant species (see Section 3.4, Vegetation).

**Table 3.9-1 Existing Land Uses in the Study Area**

Land Use Type	Permit Boundary <sup>1</sup>		2-mile Perimeter Area <sup>1</sup>		Study Area Total	
	Acres	Percent	Acres	Percent	Acres	Percent
Residential <sup>2</sup>	152	0.7	1,577	4.0	1,729	2.9
Industrial/Commercial	1,031	5.1	3,474	8.8	4,505	7.5
Pasture	5,702	28.0	7,438	18.9	13,140	22.0
Forestry	13,409	65.8	24,767	62.8	38,176	63.8
Developed Water Resources	84	0.4	2,172	5.5	2,256	3.8
<b>Total</b>	<b>20,378</b>	<b>100.0</b>	<b>39,428</b>	<b>100.0</b>	<b>59,806</b>	<b>100.0</b>

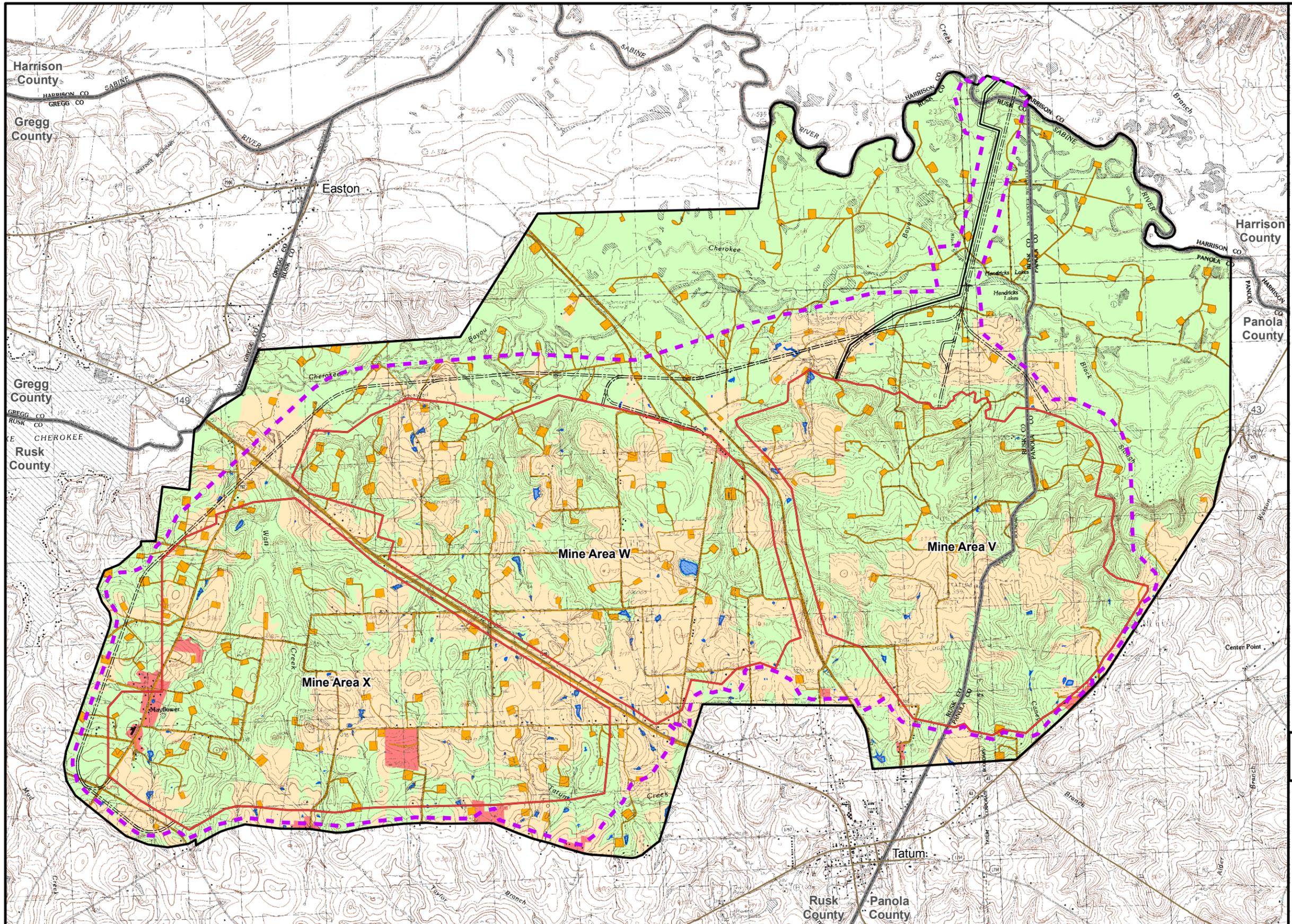
<sup>1</sup> From HDR 2009c. Slight acreage discrepancy for the permit boundary due to rounding.

<sup>2</sup> Acreage for rural residences may be included with the predominant use of the property rather than as residential.

The predominant land use type in the study area is forestry, which accounts for nearly 64 percent of all land use. Pasture land accounts for 28 percent of the land within the permit boundary, and nearly 19 percent of the land in the 2-mile perimeter area. The predominance of forestry and pasture land further illustrates the rural, undeveloped nature of the study area. Residential uses account for less than 1 percent of the land within the permit boundary and 4 percent of the 2-mile perimeter area.

Several utility and transportation corridors cross the study area. The BNSF railroad bisects the Rusk Permit Area in a northwest to southeast direction. SH 149 also bisects the Rusk Permit Area approximately 2 miles southwest of the BNSF railroad. Multiple petrochemical pipelines, electric transmission lines, water supply lines, and local phone and electric lines also are present in the permit boundary.

The nearest incorporated communities are Easton and Tatum, located immediately northwest and south of the permit boundary, respectively. Easton (population 578) is located approximately 0.25 mile northwest of the permit boundary adjacent to SH 149. Tatum (population 1,173), is located approximately 0.5 mile south of the permit boundary, at the junction of SH 149 and SH 43. Larger communities providing regional shopping and services to the area include Longview (population 76,885 Metropolitan Statistical Area population 204,117), 10 miles to the northwest; Marshall (population 24,332), 13 miles north; and Henderson (population 12,866), 18 miles southwest. (Population figures are estimates for January 1, 2008 [Texas State Data Center 2008].)



**Legend**

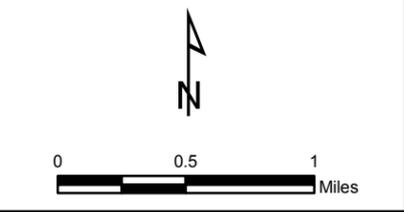
- Proposed Rusk Permit Area Boundary
- Proposed Mine Areas
- Proposed Life-of-mine Disturbance Boundary

**Existing Land Uses**

- Forest Land
- Pastureland
- Industrial/Commercial
- Developed Water Resources
- Residential

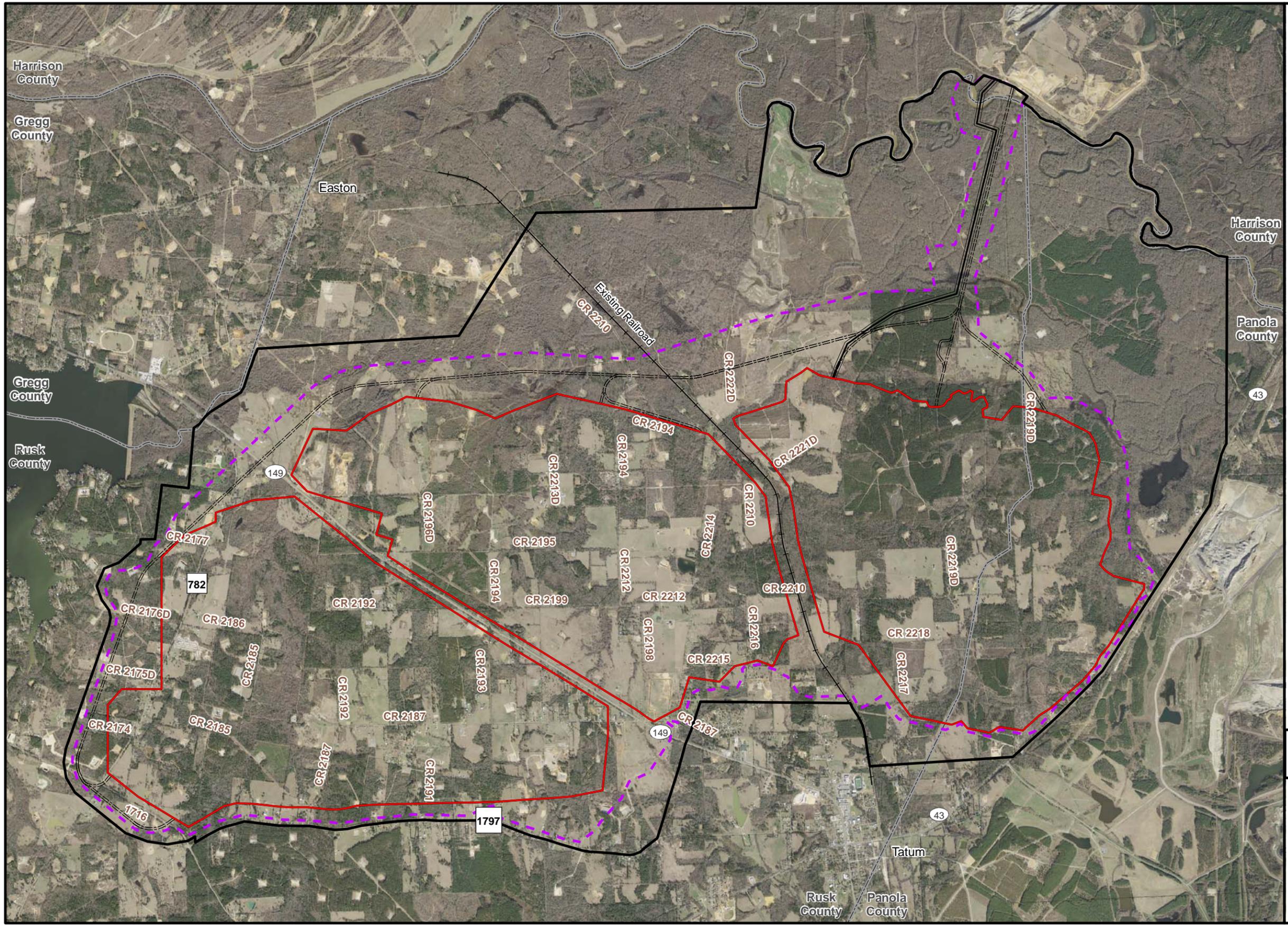
Main Haul Roads  
 Dragline Walkway  
 County Boundary

Source: Sabine 2009b, 2010c.



**Rusk Permit Area EIS**

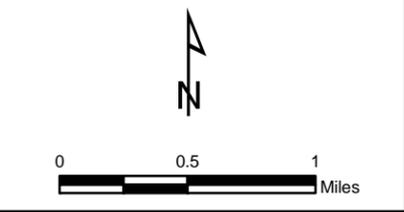
Figure 3.9-1  
Existing Land Uses



**Legend**

- Proposed Rusk Permit Area Boundary
- Proposed Mine Areas
- Proposed Life-of-mine Disturbance Boundary
- County Boundary
- Main Haul Roads
- Dragline Walkway
- Existing Railroad

Source: Sabine 2009b, 2010c.



**Rusk Permit Area EIS**

Figure 3.9-2  
Satellite Photo of Rusk Permit Area

### 3.9.1.2 Recreation

There are no parks or recreation areas within the permit boundary. Dispersed recreation activities are available in the project area on private land including, but not limited to, hunting, fishing, and horseback riding.

The nearest public recreation area is Martin Creek Lake State Park, approximately 2.5 miles south of the permit boundary. This 287-acre park is located on Martin Creek Lake, a 5,000-acre man-made lake constructed to provide cooling water for the lignite- and coal-fired 2,250-MW Martin Lake Power Plant. The park offers multiple recreation opportunities including year-round fishing, camping, wildlife observation and photography, picnicking, boating, water skiing, unsupervised lake swimming, backpacking, hiking, and interpretive programs. The most popular game fish at Martin Creek Lake is the largemouth bass. The lake also is considered to have an excellent channel cat fishery and good crappie and sunfish populations (TPWD 2010c). Martin Creek Lake State Park had nearly 15,000 visits in fiscal year 2007 (TPWD 2007b).

There are no designated wilderness areas, wild and scenic rivers, or other specially designated recreation or open space facilities within the study area or vicinity. A TPWD (2000) identified “ecologically significant” segment of the Sabine River is located on the northern boundary of the Rusk Permit Area, as discussed in Section 3.2.4, Surface Water. The river banks along this segment of the Sabine River are all privately owned so there is little land-based access for recreation use of the river segment. The river is used for boating and canoeing, and is especially popular for fishing, although the heaviest use is near road crossings where public access is available.

## 3.9.2 Environmental Consequences

### 3.9.2.1 Proposed Action

#### Land Use

Under the Proposed Action, up to 14,392 acres, or 71 percent of the 20,377-acre Rusk Permit Area, incrementally would be disturbed during the 30-year life of the mine. The remaining 5,985 acres would provide buffer areas. Of the total disturbance area, the acreage of lignite mining disturbance at any given time during mine operations would be approximately 500 acres, because the mined-out pits would be sequentially backfilled and reclaimed.

Public lands would not be disturbed except for road ROWs. Generally, county roads would be mined through and reconstructed when mining and reclamation activities in a given area have been completed (approximately 7 to 10 years following completion of mining) (see **Table 2-6**) (see Section 3.11, Transportation, for additional information on road closures).

Existing major utilities (e.g., natural gas lines, transmission lines) in the proposed disturbance area would be relocated in advance of mining. Temporary service interruptions may be experienced during brief periods of construction. All utility relocation activities would be coordinated with the respective service provider, and relocation work either would be conducted by the provider or completed under the provider’s direction.

The 14,392 acres of proposed disturbance of mostly rural land uses represent 0.8 percent of the 1,711,897 total acres in Rusk, Panola, and Harrison counties. The resulting changes in land use patterns would continue for the life of the mine.

As noted above, a majority of the existing land use within the proposed permit boundary is considered forest land. Surface land owners may harvest economically recoverable forest products from proposed disturbance areas prior to mining. There are natural gas, oil, and water wells in the proposed disturbance area. All wells would be sealed in accordance with RCT regulations. Land uses noted as commercial/industrial in the permit area are primarily oil and gas wells. As discussed in Section 3.1, Geology and Mineral Resources, access to oil and gas resources would be restricted during active mining.

There is the possibility that wells would be re-drilled, or new wells drilled, following the completion of mining. The status of these facilities would be determined between the owner and Sabine. Pasture lands would be temporarily displaced by mining, but would be reclaimed and released to surface owners in approximately 7 to 10 years following completion of mining.

It is not expected that the proposed project would restrict growth of Tatum. There are approximately 300 acres of mostly vacant and potentially developable land between developed areas of Tatum and the proposed Rusk Permit Area boundary. There are substantially larger vacant acreages to the east, south, and west of the community. Considering the modest growth that has occurred in the area in recent years, and that is projected to continue at less than 0.4 percent annually into the foreseeable future for Panola and Rusk counties, there is ample land available to accommodate growth of Tatum during the life of the proposed project (see Section 3.10, Social and Economic Values for past and projected growth).

Of the 609 structures located in the permit boundary, two are churches and as many as 400 are residences, which would be acquired by SWEPCO through purchase or leasing arrangements with the owners. Residents would be relocated. The cemetery adjacent to one of the churches is in an area proposed for disturbance in Area W during mine years 16 through 20. The cemetery would have to be moved in accordance with Texas state law prior to disturbing the area. In general, disinterment of remains would require approval by relatives of each decedent or by a district court (Texas Health and Safety Code 2009). Property acquisition and leasing would occur according to a phasing schedule during the 30-year life of the mine.

Following mining, impacted lands within the mine would be reclaimed to support post-mine land uses according to a plan to be determined in cooperation with individual property owners. Post-mine land uses are expected to be similar to the existing land uses, primarily including pastureland, forestry, and developed water resources, as these uses would be consistent with those in adjacent areas. Small acreages of other land uses would be interspersed in accord with agreements with surface land owners. **Figure 2-10** shows the conceptual post-mining land use plan for the proposed Rusk Permit Area.

### Recreation

The Proposed Action would result in minimal effects on recreation resources. There are no public recreation facilities in the permit boundary. Martin Creek Lake State Park is the only identified public recreation area within 5 miles of the Rusk Permit Area. Private recreation activities, such as hunting or horseback riding, that currently may occur on lands within the proposed permit boundary would be precluded from the proposed disturbance areas for the life of the mine for safety and security reasons. Any such activities would be displaced to other public or private lands in the area; however, it is anticipated that participation in these activities would occur at very low levels and would have minimal effects on recreation resources in the region.

As noted in Section 3.10, Social and Economic Values, the Proposed Action is expected to have no measureable effect on population in the four-county study area. Consequently, there would be no project-related effect on demand for recreation opportunities or facilities in the area.

The only portion of the project-related disturbance area that would intersect the Sabine River would be the dragline walkway and haul road corridor. Boating or canoeing on the river would be blocked by construction and use of the dragline walkway for up to 2 months and for brief periods during operations to facilitate subsequent dragline crossings of the river. The river would be open for boating and canoeing during the remainder of the project life. All other disturbance and all of the mining areas would be a minimum of 1.5 miles from the river. Because public access to river-based recreation must come via the river itself, recreationists would be largely unaffected for most of the project life, except near the haul road where trucking activity and noise would be noticeable and would interrupt the sense of solitude and natural beauty.

### **3.9.2.2 No Action Alternative**

Under the No Action Alternative, the proposed Rusk Permit Area would not be developed, and the associated effects to land use and recreation would not occur. Currently authorized operations at the South Marshall Permit Area of the South Hallsville No. 1 Mine and existing mine-related effects to land use and recreation would continue through 2035. Under this alternative, it is assumed that approximately 300 jobs would be lost at the completion of mining and reclamation for the South Marshall Permit Area in approximately 2035, which may result in a small displacement of population from the area if alternative employment opportunities are not available at that time. This potential population decline would result in a minor, unquantifiable reduction in demand for recreation facilities and activities in the region.

### **3.9.3 Cumulative Impacts**

The past and present actions and RFFAs are identified in Section 2.7 and shown in **Figure 2-12**. Land use and recreation effects of past and present actions in the study area are reflected in Section 3.9.1, Affected Environment. Consequently, any cumulative effects of these past and present activities and the proposed Rusk Permit Area would be the same as described for the Proposed Action.

RFFAs include the proposed Marshall Lignite Mine and a conveyor for the Rusk Permit Area. The proposed Marshall Lignite Mine would be outside the land use and recreation cumulative effects study area, so it would have no identifiable cumulative interaction with the proposed Rusk Permit Area. The conveyor, if constructed, would be constructed on lands that would be disturbed for development of the Rusk Permit Area and would have very minor, very short-term effects on local employment. Consequently, no cumulative effects on recreation or land use would be anticipated.

### **3.9.4 Monitoring and Mitigation Measures**

No monitoring or mitigation measures are being considered beyond the statutory requirements for reclamation and post-mining land use planning.

### **3.9.5 Residual Adverse Effects**

Most land use effects of the proposed Rusk Permit Area would be temporary and would cease on or before completion of reclamation and closure of the mine. Complete restoration of forest lands may continue for a period of years following closure and reclamation; however, any such effects would cease with maturation of the forested areas.