

## 2.2 LAND

This section establishes the nature and extent of current and proposed land use within the vicinity and region of the proposed site that might be impacted by station construction and operation. The review evaluates both on and offsite areas that will be modified for the sole purpose of supporting construction and maintenance of the proposed facilities.

### 2.2.1 The Site and Vicinity

The Bell Bend Nuclear Power Plant (BBNPP) site is located in Salem Township, Luzerne County, Pennsylvania, adjacent to Susquehanna Steam Electric Station (SSES) along the Susquehanna River in an area of open deciduous woodlands interspersed with grasslands, previously cultivated fields, and orchards. The largest community within 10 mi (16 km) of the site is the borough of Berwick, Pennsylvania, approximately 5 mi (8 km) to the southwest. The nearest metropolitan areas are Wilkes-Barre, Pennsylvania, approximately 20 mi (32 km) to the northeast; Allentown, Pennsylvania, approximately 50 mi (80 km) to the southeast; and Harrisburg, Pennsylvania, approximately 70 mi (113 km) southwest of the BBNPP site (PPL, 2006).

PPL Susquehanna, LLC, owner of SSES, owns 2,355 ac (953 ha) on both sides of the Susquehanna River. SSES is on the west side of the Susquehanna River on 1,480 ac (599 ha), that includes the SSES property (1,080 ac (437 ha)) and the Riverlands Recreation Area (400 ac (162 ha)), a strip of land between the power generating facilities and the Susquehanna River (PPL, 2006). The Riverlands Recreation Area includes natural and recreational areas:

- ◆ Riverlands Nature Center - The Nature Center is located in the Susquehanna Energy Information Center at the entrance to the Recreation Area.
- ◆ Riverlands Recreation Area - This recreation area on the west side of the river is a popular spot for picnicking, group outings, hiking, sports, and playing.
- ◆ Lake Took-A-While - A 30 ac (12 ha) fishing lake and a restored section of the North Branch Canal provide fishing opportunities and are open to the public. Boating is allowed, but no gasoline engines are permitted.
- ◆ Wetlands Nature Area - This 94 ac (38 ha) tract of riverine forest, marsh, swamp, and vernal pools has been set aside as an area for nature study and education. A portion of the long-abandoned North Branch Canal runs north-south across the property (PPL, 2006).

A map depicting the land use within the BBNPP Project Boundary is presented in Figure 2.2-1. Land use categories for this map are consistent with the land use classification codes listed in "USGS Land Use and Land Cover Data" (USGS, 2008). PPL Susquehanna, LLC, PPL Bell Bend, LLC, and other entities of PPL Corporation currently own the entire BBNPP and SSES site. The BBNPP site will be divided into a west parcel and an east parcel. PPL Susquehanna, LLC, which owns 90% of SSES Units 1 and 2 and Allegheny Electric, which owns 10% of SSES Units 1 and 2, will retain ownership of the east parcel. PPL Bell Bend, LLC will be the owner of BBNPP and the owner of the west parcel. The owner and operator of BBNPP will be PPL Bell Bend, LLC.

The areas devoted to major uses of the land within the BBNPP Project Boundary are summarized in Table 2.2-1. In addition, Table 2.2-1 identifies the estimated acreage within each land use category following construction. The Table is consistent with USGS land use categories. The image used to create Figure 2.2-1 and Table 2.2-1 is part of a large scale land-use classification conducted by the USGS and augmented by wetlands delineation and

stream boundary field surveys within and adjacent to potential areas of disturbance inside of the BBNPP Project Boundary. The scale of this image provides a generalized land-use cover, with the exception of wetlands, which does not take into account small features and parcels of land. A more detailed figure and description of the site is available in Section 2.4.1. A map showing major land uses within 6 mi (10 km) of the project is presented in Figure 2.2-2 with land uses classified consistent with the 2008 USGS land use/cover categories (USGS, 2008). Major land uses in the 6 mi (10 km) vicinity of the project are summarized in Table 2.2-2. The vicinity is defined as the area encompassed within a radius of 6 mi (10 km) surrounding the plant site. A topographical map of the BBNPP Project Boundary is presented in Figure 2.2-3 (USGS, 2008).

There are no known claims by Native Americans on lands within the BBNPP Project Boundary or within the 6 mi (10 km) radius of the BBNPP site. There are no known lands of special land-use within the BBNPP site. Special land-use categories are defined as Native American or military reservations, State and national parks, national monuments, national forests, wild and scenic rivers, designated coastal-zone areas, and wilderness areas.

State lands, as detailed in Table 2.2-3, within the vicinity of the BBNPP site are limited to areas of two state game lands and two state park lands. State Game Land No. 55 covers 2,511 ac (1,016 ha) in Columbia County just west of the BBNPP site. State Game Land No. 260, located east of the BBNPP site, covers 3,087 ac (1,249 ha) in Luzerne County (PGC, 2006). The Pennsylvania Game Commission maintains/manages both the wildlife and its habitats within the Game Land boundaries and provides recreation and education for the general public. The two state park parcels, Theta Lands, occupy 109 ac (44 ha) north of the proposed site. The Theta Lands are part of the Theta Lands Conservation Project which encompasses more than 10,000 ac (4,047 ha) in Luzerne and Lackawanna Counties. These lands provide recreational opportunities and clean water to the people of this region (DCNR, 2008).

There are no known National Parks, National Forests, or National Monuments within the BBNPP site vicinity.

Private lands held in trust or through other use restrictions include two areas maintained by private owners through the North Branch Land Trust (NBLT) as detailed in Table 2.2-4 (NBLT, 2008). The NBLT property located to the north of the BBNPP site covers an area of 49 ac (20 ha) and connects with State Game Land No. 260. The second NBLT trust land, located to the south of the BBNPP site, occupies 88 ac (35 ha) (TCF, 2004).

There are two residences within the BBNPP exclusion area boundary that will be vacated prior to plant operations.

Figure 2.2-1 and Figure 2.2-2 show major roads/highways and utility rights-of-way that cross and are in the vicinity of the BBNPP site. There is an operating rail line along both banks of the Susquehanna River within the 6 mi (10 km) vicinity of the BBNPP site. The BBNPP site is bordered on the south and east by the Susquehanna River. The Susquehanna River is frequented by recreational boaters, but is not used for commercial shipping. Egress from the areas surrounding the site is limited to the north and west along U.S. Highway 11, which runs along the north-western bank of the Susquehanna River. (USGS, 1999)

No significant mineral resources within or adjacent to the BBNPP site have been identified. The only mineral resources occurring at the site are siltstone and sand and gravel (PPL, 1972). The siltstone could not be mined economically due its depth. Deposits of sand and gravel underlie

most portions of the Susquehanna River Valley. A very small portion of these deposits are under the Susquehanna River floodplain at the BBNPP site. [Proprietary Information - Withheld under 10 CFR 2.390(a)(4)-See Part 9 of this COL Application]. There are no mineral resources currently being mined located adjacent to the BBNPP site.

The BBNPP site is located in the southwestern quadrant of Luzerne County. This area is characterized by forests, open, undeveloped, agricultural, mined, and developed land. The developed portions of this area are located in and around the city of Hazleton and the eastern outskirts of Berwick Borough. As shown on Figure 2.2-4, most of the area within the BBNPP Project Boundary is zoned as an agricultural district with substantial portions zoned as conservation district and heavy industrial. (Salem, 2008).

The proposed project also requires approval of a proposed plan of development which must be obtained from Salem Township. The Salem Township Planning and Zoning Commission is responsible for managing the consolidated review of the environmental, engineering, socioeconomic, planning and cost of those projects which require an approved Plan of Development. Various state and county agencies provide assistance and various plan and permit approvals to support the review and approval effort.

## **2.2.2 Transmission Corridors and Offsite Areas**

### **2.2.2.1 Existing Corridors**

The BBNPP property lies within the Pennsylvania, New Jersey and Maryland (PJM) Regional Transmission Organization. The existing transmission system, located on the Susquehanna Steam Electric Station (SSES) site, consists of two substations: 1) the 500 kV substation, which has two 500 kV circuits, and 2) the 230 kV T-10 substation, which has three 230 kV circuits. A 230 kV switchyard is also located on the SSES site, which has seven 230 kV circuits and one 500/230 kV interconnection.

Six transmission lines connect SSES to the regional grid and will be used by BBNPP (PPL, 2006). There are three short ties in the SSES vicinity totaling approximately 6 mi (10 km) that connect SSES to the 230 kV electrical system. These ties are located primarily within SSES controlled areas and are not accessible to the public. However, U.S. Highway 11, PA State Highway 239, and other paved roads in the immediate plant vicinity are crossed by the short ties. Stanton #2 is a single circuit 230 kV line which runs generally northeast from SSES for approximately 30 mi (48 km) in a 100 to 400 ft (30 to 121 m) wide corridor. The Wescosville 500 kV line connects SSES with the Alburtis substation. It runs generally southeast for approximately 75 mi (121 km) in a 100 to 400 ft (30 to 107 m) wide corridor. The Sunbury #2 is a 500 kV line which shares a corridor with the Sunbury #1 230 kV line and runs for approximately 30 mi (48 km) in a west-southwest direction. The corridor is approximately 325 ft (99 m) wide. Existing transmission corridors are shown in Figure 2.2-1 and Figure 2.2-2 and Figure 2.2-5 (PPL, 2006).

### **2.2.2.2 Proposed Transmission System Modifications**

No additional transmission corridors or other offsite land use would be required to connect the new reactor unit to the existing electrical grid. The following facilities would be constructed on the BBNPP site:

- ◆ One new 500 kV switchyard to transmit power from BBNPP;
- ◆ Two new 500 kV, 4,260 MVA circuits on individual towers, connecting the BBNPP substation to the existing SSES 500 kV Yard, approximately 0.50 mi (0.80 km) in length,

and to the proposed 500 kV Susquehanna Yard #2, approximately 0.75 mi (1.21 km) in length;

- ◆ One new 500 kV transmission system switchyard (Susquehanna 500 kV Yard #2); and
- ◆ Expansion of the existing Susquehanna 500 kV Yard.

Additionally, the 230 kV transmission lines currently passing through the BBNPP site will be relocated to run to the north of Beach Grove Road in order to provide a buffer from the BBNPP Circulating Water System cooling towers and provide additional areas for the location of plant-related structures. An expansion of the existing SSES 500 kV switchyard will be required to accommodate the connection to the new BBNPP switchyard.

In its generation interconnection Impact Study Restudy (PJM, 2008), PJM identified that BBNPP contributes to two previously identified transmission study upgrades for overloads, initially caused by prior Queue position generation additions. Any related off-site modifications are due to prior Queue position generation additions, and will be implemented independent of BBNPP.

### 2.2.2.3 Land Use

In total, for the purpose of connecting SSES to the transmission system, PPL Susquehanna has approximately 150 mi (241 km) of corridor that occupy approximately 3,341 ac (1,352 ha) crossing eight counties (Luzerne, Carbon, Columbia, Lehigh, Northampton, Northumberland, Montour, and Snyder). BBNPP is expected to utilize these existing corridors as well. The corridors pass through land that is primarily agricultural or forest land. The areas are mostly remote, with low population densities. The longer lines cross numerous state and U.S. highways. Impact of these corridors on land usage is minimal; farmlands that have corridors passing through them generally continue to be used as farmland. (PPL, 2006).

Additionally, SSES and BBNPP will both be connected to the existing Susquehanna-Roseland transmission line that will be brought into service in 2012, independent of the BBNPP, as described in FSAR Chapter 8. Land use within the new transmission corridor is expected to be similar to that of the existing corridors.

## 2.2.3 The Region

The region within a 50 mi (80 km) radius of the BBNPP site includes all or part of 22 counties in Pennsylvania. The 50 mi (80 km) region including major waterways and highways are shown in Figure 2.2-6. Interstate 81 (I-81) passes east of the site intersecting I-80 to the south of the BBNPP site. These two interstates connect with portions of I-84, I-380, I-476, and I-78 which are all within a 50 mi (80km) radius of the site. (USGS, 1999)

Land acreage devoted to major uses within the 50 mi (80 km) region are presented in Table 2.2-5 and shown on Figure 2.2-7. The land use/cover categories used in the table are those used by the U.S. Geological Survey. Principal agricultural commodities, dollar values of produced commodities, amount of county land used for agriculture, and the average land value based on the last (2002) U.S. Department of Agriculture survey, for these principal agricultural commodities are summarized in Table 2.2-6 (USDA, 2002).

This section focuses on two Pennsylvania counties (Luzerne and Columbia Counties) within the region for the potential construction and operation of the BBNPP site which is adjacent to

the existing SSES site. The region is defined as an area within a 50 mi (80 km) radius of the site, but excludes the site and vicinity.

More than 89% of the current SSES employees reside in Luzerne and Columbia counties (PPL, 2006). Most land use or population changes would occur in these two counties where the construction activity would occur and where the construction and operation employees would be expected to live. As discussed in Section 2.2.2, the proposed transmission system activities would occur on the existing SSES site property and at existing substations along existing transmission corridors. The addition of BBNPP only requires a new substation and new transmission lines on the BBNPP site to connect the unit to the existing SSES system. The 230 kV transmission lines currently passing through the BBNPP site will be relocated to run to the north of Beach Grove Road in order to provide a buffer from the BBNPP CWS cooling towers and provide additional areas for the location of plant-related structures. An expansion of the existing Susquehanna 500 kV switchyard will be required to accommodate the connection to the new BBNPP switchyard (PPL, 2006).

Road access to SSES is via U.S. Route 11, a two-lane paved road with a northeast southwest orientation (Figure 2.1-2 and Figure 2.1-3). SSES lies to the west of U.S. Route 11 and the Susquehanna River. Approximately 4 mi (6.4 km) north of SSES, U.S. Route 11 intersects with State Route (SR) 239, which travels in a northwest-southeast direction. East of this intersection, SR 239 crosses the Susquehanna River.

Several miles southwest of SSES, U.S. Route 11 intersects with SR 93. East of this intersection, SR 93 crosses the Susquehanna River. East of the intersection of SR 93 and the Susquehanna River, SR 93 intersects SR 339, which has a northeast-southwest orientation. Five to ten miles (8 to 16 km) south of SSES, SRs 93 and 339 intersect with Interstate 80, which has an east to west orientation. Five to ten miles southeast of SSES, Interstate 80 intersects with Interstate 81, which has a northeast-southwest orientation.

Employees traveling from the north or northwest of SSES would use SR 239 and U.S. Route 11 to reach the station. Employees traveling from the northeast would use U.S. Route 11. Employees traveling from the south or southwest of SSES could use varying combinations of the following roads to reach the station: Interstate 80, SR 339, SR 93, and U.S. Route 11. Employees traveling from the east and southeast could use SR 239, Interstates 80 and 81, SR 93, and U.S. Route 11. When nearing SSES, all employees must use U.S. Route 11. (PPL, 2006)

Major land-based transportation routes and utility routes within the region are depicted in Figure 2.2-2 and Figure 2.2-5. An existing gas transmission line is shown on Figure 2.2-2. (USGS, 1999)

Because of the location of BBNPP, the potential land use impacts would be greatest in Luzerne County. Potential population impacts would be greatest in Luzerne County and Columbia County as discussed earlier in this section. It is expected that the future potential employee relocation would likely follow the same trend. Therefore, this section excludes discussion of the 50 mi (80 km) region and focuses primarily on the two counties within the region. Table 2.2-7 and Table 2.2-8 indicate six land use classifications for land in Luzerne County and Columbia County. (USGS, 1999)

The three classifications of barren, wetlands and water together account for 6% and 2% of total county lands for Luzerne and Columbia Counties, respectively. Urban or built-up lands occupy little of both counties' land (Luzerne County 11% and Columbia County 7%). The



majority of each county is dominated by forest and agricultural lands. A combined total of 82% of Luzerne County's land use and 91% of Columbia County's land use fall within these two categories.

Major trust lands in the region are shown in Figure 2.2-7 and are summarized in Table 2.2-9 (TCF, 2004). While there are no known trust holdings in Columbia County, trust holdings within Luzerne County generally consist of several small holdings instead of large individual tracts of land. The known trust lands within Luzerne County are controlled by a mix of private owners and the North Branch Land Trust. These eight trust lands occupy 1,913 ac (774 ha). (TCF, 2004)

County and local parks within the 50 mi (80 km) region are shown in Figure 2.2-7 and are summarized in Table 2.2-10 (PCS, 1998). There are 255 known county and local parks within the region. Two of these areas (Moon Lake and Seven Tubbs Nature Area) are located in Luzerne County and account for 1,386 ac (561 ha) of the lands accessible to the public. Two more of these areas (Twin Bridges and Briar Creek) are located within Columbia County and account for 139 ac (56 ha) of publicly accessible land. (PCS, 1998)

State controlled lands within the region mainly comprise State Parks, Game Lands, and Forests. These areas are shown in Figure 2.2-7 and are summarized in Table 2.2-11, Table 2.2-12, and Table 2.2-13 respectively. Although no state parks fall solely within Columbia County, it does share one of Luzerne County's six state parks (Theta Lands, Fish Commission Lands, Frances Slocum, Lehigh Gorge Nescopceck, and Ricketts Glen) which provide a total of 39,065 ac (15,808 ha) to the general public (DCNR, 2008). Five State Game Lands fall with the boundary of Columbia County, adding 71,404 ac (28,896 ha) to public land use while Luzerne County provides the public with 12 game lands totaling 106,211 ac (42,982 ha) (PGC, 2006). There are two state forests within the 50 mi (80 km) region falling within Luzerne and Columbia Counties. Luzerne County holds the Lackawanna State Forest 13,142 ac (5,318 ha) and Columbia holds the Weiser State Forest 28,736 ac (11,629 ha) within its boundaries. (DCNR, 2006a) (DCNR, 2008) (PGC, 2006)

Columbia County provides one of eight Wild/Natural Areas within the 50 mi (80 km) region. The Jakey Hollow Natural Area occupies 51 ac (21 ha) of the county's lands and provides recreation and outdoor activities for the surrounding public (DCNR, 2006b). The Wild/Natural areas are shown in Figure 2.2-7 and are summarized in Table 2.2-14.

#### 2.2.4 References

**DCNR, 2006a.** PA Department of Conservation and Natural Resources, Bureau of Forestry, State Forest Lands, Website: [http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=dcnr\\_stateforestlands\\_2006.xml&dataset=263](http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=dcnr_stateforestlands_2006.xml&dataset=263), Date accessed: March 15, 2008.

**DCNR, 2006b.** PA Department of Conservation and Natural Resources, Bureau of Forestry, Wild and Natural Areas, Website: [http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=dcnr\\_wildnaturalareas.xml&dataset=932](http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=dcnr_wildnaturalareas.xml&dataset=932), Date accessed: March 15, 2008.

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**PGC, 2006.** Pennsylvania Game Commission, State Game Lands, Website: [http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=PGC\\_StateGamelands2007.xml&dataset=86](http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=PGC_StateGamelands2007.xml&dataset=86), Date accessed, March 15, 2008.

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**PPL, 2006.** PPL Susquehanna, LLC, Appendix E. Applicant's Environmental Report - Operating License Renewal Stage, Susquehanna Steam Electric Station, September 2006.

**TCF, 2004.** The Conservation Fund, Protected Lands Inventory, Website: [http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=PA\\_PLI\\_NPF\\_Private.xml&dataset=885](http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=PA_PLI_NPF_Private.xml&dataset=885), Date accessed, March 15, 2008.

**Salem, 2008.** Salem Township, Luzerne County, Zoning Map, prepared by Michael J. Pasonick, Jr. and Associates, Inc, Date reviewed: March 26, 2008.

**USDA, 2002.** County Summary Highlights: 2002, U.S. Department of Agriculture, Website: [http://www.nass.usda.gov/census/census02/volume2/pa/st42\\_2\\_2\\_001\\_001.pdf](http://www.nass.usda.gov/census/census02/volume2/pa/st42_2_2_001_001.pdf), Date accessed: March 15, 2008.

**USGS, 1999.** Land Cover Data Set, U.S. Geological Survey, Website: [http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=nlcd\\_pa\\_tiff\\_alb.xml&dataset=339](http://www.pasda.psu.edu/uci/MetadataDisplay.aspx?entry=PASDA&file=nlcd_pa_tiff_alb.xml&dataset=339), Date accessed, March 15, 2008.

**USGS, 2008.** U.S. Geological Survey (USGS), Land Use and Land Cover Data, LULC Categories, Website: [http://www.webgis.com/lulc\\_data/9\\_app.html](http://www.webgis.com/lulc_data/9_app.html), Date accessed, March 15, 2008.

**Table 2.2-1 — Land Use Categories within BBNPP Project Boundary: Pre- and Post-Construction**

<b>Land Use Category</b>	<b>Pre-Construction</b>			<b>Post-Construction</b>		
	<b>Acres*</b>	<b>Hectares*</b>	<b>Percent of Total</b>	<b>Acres*</b>	<b>Hectares*</b>	<b>Percent of Total</b>
Urban or Built-up	220.8	89.4	10.7	859.6	347.9	41.8
Barren	21.5	8.7	1.0	19.2	7.8	0.9
Wetlands	159.0	64.4	7.7	157.6	63.8	7.7
Water	71.9	29.1	3.5	71.8	29.1	3.5
Forest	1141.7	462.0	55.6	730.4	295.6	35.5
Agricultural	440.0	178.1	21.4	216.3	87.5	10.5
Total*	2054.9	831.6	100.0	2054.9	831.6	100.0

\* Values and totals presented may differ slightly due to round-off methodology.



**Table 2.2-2— Land Use Categories within 6 mi (10 km) Vicinity**

<b>Land Use Category</b>	<b>Acres</b>	<b>Hectares</b>	<b>Percent of Total</b>
Urban or Built-up	6,411	2,594	9
Barren	455	184	<1
Wetlands	902	365	1
Water	2,468	999	3
Forest	47,419	19,190	66
Agricultural	14,727	5,960	20
Total	72,382	29,292	100

**Table 2.2-3— State Controlled Lands within 6 mi (10 km) Vicinity**

<b>County</b>	<b>Type</b>	<b>Name</b>	<b>Acres</b>	<b>Hectares</b>
Columbia	State Game Land	SGL No. 55	2,511	1,016
Luzerne	State Game Land	SGL No. 260	3,087	1,249
Luzerne	State Preserve	Theta Lands	109	44

**Table 2.2-4— Trust Land within 6 mi (10 km) Vicinity**

<b>Trust Land</b>	<b>Owner</b>	<b>County</b>	<b>Acres</b>	<b>Hectares</b>
North Branch Land Trust Property	Privately Owned Conservancy	Luzerne	49	20
North Branch Land Trust Property	Privately Owned Conservancy	Luzerne	88	35

**Table 2.2-5— Land Use Categories within 50 mi (80 km) Region**

<b>Land Use Category</b>	<b>Acres</b>	<b>Hectares</b>	<b>Percent of total</b>
Urban/Built-up	468,132	189,446	9
Barren	68,592	27,758	1
Wetlands	83,797	33,911	2
Water	84,026	34,004	2
Forest	3,279,101	1,327,005	65
Agricultural	1,042,837	422,021	21
Total	5,026,484	2,034,146	100

Table 2.2-6— Land Use Categories within 50 mi (80 km) Region

County	Total Farmland Acres (Hectares)	Land Value (Dollars per acre)	Grains	Tobacco	Vegetables, Melons, Potatoes	Fruits, Nuts, Berries	Nursery, Greenhouse, Sod	Hay	Poultry, Eggs	Cattle	Dairy Products, Cows	Equine	Aquaculture
Values listed in 1000's of dollars													
Bradford	302,475 (122,407)	\$1,790	\$1,175		\$752		\$1,534	\$3,204		\$27,097	\$54,922	\$87	
Berks	215,679 (87,282)	\$5,527	\$10,203		\$2,312	\$4,436	\$96,809	\$4,924	\$70,845	\$18,252	\$59,970	\$477	\$244
Carbon	19,257 (7,793)	\$4,436	\$238				\$3,698	\$497	\$22	\$344	\$505	\$71	\$61
Columbia	123,514 (49,984)	\$3,137	\$4,739		\$3,524		\$6,415	\$1,219	\$2,499	\$1,929	\$8,832	\$105	\$82
Dauphin	94,983 (38,438)	\$5,291	\$4,493	\$29	\$1,217	\$843	\$1,197	\$2,007	\$14,248	\$5,957	\$15,100	\$209	\$69
Lackawanna	32,931 (13,327)	\$3,205			\$3,832	\$668	\$3,262	\$618			\$3,110	\$477	
Lebanon	125,066 (50,612)	\$5,349	\$7,081	\$150	\$3,950	\$713	\$4,138	\$963	\$68,446	\$18,499	\$58,294	\$184	\$1,053
Lehigh	91,304 (36,949)	\$4,504	\$8,332			\$2,510	\$21,386	\$1,944		\$1,066	\$3,267	\$553	
Luzerne	73,216 (29,629)	\$3,541	\$1,364		\$7,822	\$1,714	\$6,136	\$767	\$33	\$921	\$3,100	\$109	
Lycoming	177,347 (71,770)	\$2,318	\$4,664	\$37	\$1,291	\$1,957	\$4,602	\$2,410	\$4,660	\$8,664	\$14,990	\$176	\$64
Monroe	32,938 (13,320)	\$5,191	\$882		\$641	\$242	\$2,348	\$454	\$17	\$324	\$360	\$67	\$1,014
Montour	39,964 (16,172)	\$2,996		\$80	\$226	\$253		\$448	\$1,604	\$1,721	\$4,332		
Northampton	77,556 (31,386)	\$4,862	\$6,866		\$1,522	\$840	\$2,486	\$1,419	\$84	\$1,034	\$6,041	\$42	
Northumberland	119,129 (48,210)	\$3,099	\$10,004	\$416	\$4,644	\$1,356	\$9,040	\$969	\$20,744	\$31,886	\$11,485	\$88	
Pike	10,113 (4,093)	\$2,878			\$15		\$992	\$38		\$29	\$432		
Schuylkill	110,946 (44,898)	\$3,383	\$3,976		\$5,716	\$1,026	\$16,717	\$1,624	\$21,535	\$3,045	\$7,206	\$127	\$1,922
Snyder	100,034 (40,482)	\$3,558	\$2,452	\$51	\$2,205	\$1,191	\$402	\$832	\$30,734	\$10,913	\$18,855	\$117	
Sullivan	31,096 (12,584)	\$1,878	\$48				\$249	\$291	\$1	\$1,105	\$5,152	\$59	\$5
Susquehanna	189,287 (76,601)	\$2,162	\$130		\$152	\$309	\$407	\$1,390		\$13,426	\$26,093	\$106	
Union	69,424 (28,095)	\$4,156	\$3,148				\$642	\$968	\$15,350	\$5,920	\$21,701		
Wayne	113,167 (45,797)	\$2,111	\$42		\$215	\$370	\$753	\$979	\$51	\$2,296	\$15,667	\$117	
Wyoming	61,846 (25,028)	\$2,276	\$307		\$530	\$203	\$780	\$743	\$3	\$1,123	\$7,592		

Note:

Values are for top agricultural commodities listed for each county. All commodity sales for 2002 Census are not listed.

**Table 2.2-7— Land Use Categories within Luzerne County**

<b>Land Use Category</b>	<b>Acres</b>	<b>Hectares</b>	<b>Percent of Total</b>
Urban or Built-up	65,383	26,459	11
Barren	12,628	5,110	2
Wetlands	12,791	5,176	2
Water	13,968	5,653	2
Forest	410,138	165,977	71
Agricultural	65,573	26,536	12
<b>Total</b>	<b>580,481</b>	<b>234,912</b>	<b>100</b>



**Table 2.2-8— Land Use Categories within Columbia County**

<b>Land Use Category</b>	<b>Acres</b>	<b>Hectares</b>	<b>Percent of Total</b>
Urban or Built-up	22,010	8,907	7
Barren	2,133	863	1
Wetlands	1,294	524	0
Water	4,082	1,652	1
Forest	194,166	78,576	62
Agricultural	89,770	36,328	29
<b>Total</b>	<b>313,454</b>	<b>126,850</b>	<b>100</b>

**Table 2.2-9— Trust Lands within 50 mi (80 km) Region**

<b>County</b>	<b>Number of Land Trusts</b>	<b>Total Acres</b>	<b>Total Hectares</b>
Berks	44	3,455	1,398
Carbon	3	9,189	3,719
Lackawanna	19	3,697	1,496
Lebanon	1	173	70
Lehigh	1	15	6
Luzerne			
Trust Land			
Private Owner		312	126
Private Owner		1,248	505
Private Owner		22	9
Private Owner		32	13
Private Owner		106	43
North Branch Land Trust Property		49	20
North Branch Land Trust Property		88	35
North Branch Land Trust Property		57	23
Luzerne Total	8	1,913	774
Lycoming	7	418	169
Monroe	174	5,567	2,253
Schuylkill	2	860	348
Susquehanna	5	1,458	590
Wayne	2	461	187
Wyoming	2	188	76

**Table 2.2-10— County and Local Parks within 50 mi (80 km) Region**

<b>County</b>	<b>Number Of Parks</b>	<b>Total Acres</b>	<b>Total Hectares</b>
Berks	178	8,629	3,492
Carbon	2	30	12
Columbia			
Twin Bridges		2	1
Briar Creek		137	55
	2	139	56
Dauphin	1	71	29
Lackawanna	4	15	6
Lehigh	39	3,255	1,317
Luzerne			
Moon Lake Park		802	325
Seven Tubbs Nature Area		584	236
Luzerne Total	2	1,386	561
Lycoming	1	430	174
Monroe	5	276	112
Montour	1	5	2
Northampton	20	860	348

**Table 2.2-11— State Park Lands within 50 mi (80 km) Region**

<b>County</b>	<b>State Park</b>	<b>Acres</b>	<b>Hectares</b>
Carbon	Beltzville	3,559	1,440
Carbon	Hickory Run	14,129	5,718
Lackawanna	Theta Lands	28,312	11,458
Lackawanna	Archbald Pothole	140	57
Lackawanna	Lackawanna	1,416	573
Luzerne	Theta Lands	16,256	6,578
Luzerne	Fish Commission Land	321	130
Luzerne	Frances Slocum	981	397
Luzerne	Lehigh Gorge	5,094	2,061
Luzerne	Nescopeck	3,627	1,468
Luzerne/Columbia	Ricketts Glen	12,786	5,174
Lycoming	Susquehanna	51	21
Monroe	Big Pocono	1,321	535
Monroe	Gouldsboro	2,395	969
Monroe	Tobyhanna	5,502	2,227
Northampton	Jacobsburg	1,032	418
Northumberland	Milton	42	17
Schuylkill	Swatara	3,453	1,397
Schuylkill	Tuscora	1,639	663
Sullivan	Worlds End	716	290
Union	Shikellamy	32	13
Wayne	Theta Lands	1,257	509
Wayne	Varden Conservation Area	346	140

**Table 2.2-12— State Game Lands within 50 mi (80 km) Region**

<b>County</b>	<b>Number of State Game Lands</b>	<b>Total Acres</b>	<b>Total Hectares</b>
Berks	6	40,858	16,535
Bradford	9	90,247	36,522
Carbon	6	57,061	23,092
Columbia			
SGL No. 329		1,701	688
SGL No. 55		2,470	1,000
SGL No. 58		12,753	5,161
SGL No. 226		4,250	1,720
SGL No. 13		50,229	20,327
Columbia Total	5	71,404	28,896
Dauphin	3	63,532	25,710
Lackawanna	6	58,078	23,503
Lebanon	2	54,317	21,981
Lehigh	3	18,193	7,362
Luzerne			
SGL No. 119		8,235	3,333
SGL No. 207		2,038	825
SGL No. 224		490	198
SGL No. 206		1,515	613
SGL No. 91		17,286	6,995
SGL No. 149		1,987	804
SGL No. 187		8,284	3,352
SGL No. 57		46,155	18,678
SGL No. 260		3,087	1,249
SGL No. 292		615	249
SGL No. 119		8,235	3,333
SGL No. 187		8,284	3,352
Luzerne Total	12	106,211	42,982
Lycoming	8	66,632	26,965
Monroe	8	51,513	20,847
Montour	1	1,220	494
Northampton	1	5,841	2,364
Northumberland	5	12,624	5,109
Schuylkill	17	117,105	47,391
Snyder	2	1,450	587
Sullivan	5	137,518	55,652
Union	3	3,555	1,439
Wayne	3	10,937	4,426
Wyoming	5	200,929	81,313

**Table 2.2-13— State Forest Lands within 50 mi (80 km) Region**

<b>County</b>	<b>State Forest</b>	<b>Acres</b>	<b>Hectares</b>
Columbia	Weiser	28,736	11,629
Luzerne	Lackawanna	13,142	5,318
Monroe	Delaware	15,786	6,388
Sullivan	Loyalsock	114,494	46,334
Union	Bald Eagle	169,402	68,554
Union	Tiadaghton	37,132	15,027



**Table 2.2-14— Wild and Natural Areas within 50 mi (80 km) Region**

<b>County</b>	<b>Wild/Natural Area</b>	<b>Acres</b>	<b>Hectares</b>
Columbia	Jakey Hollow Natural Area	51	21
Lackawanna	Spruce Swamp Natural Area	70	28
Lycoming	Devil's Elbow Natural Area	391	158
Lycoming	Mcintyre Wild Area	7,251	2,934
Pike	Pine Lake Natural Area	72	29
Sullivan	Tamarack Run Natural Area	199	81
Sullivan	Kettle Creek Wild Area	1,773	718
Sullivan	Kettle Creek Gorge Natural Area	756	306

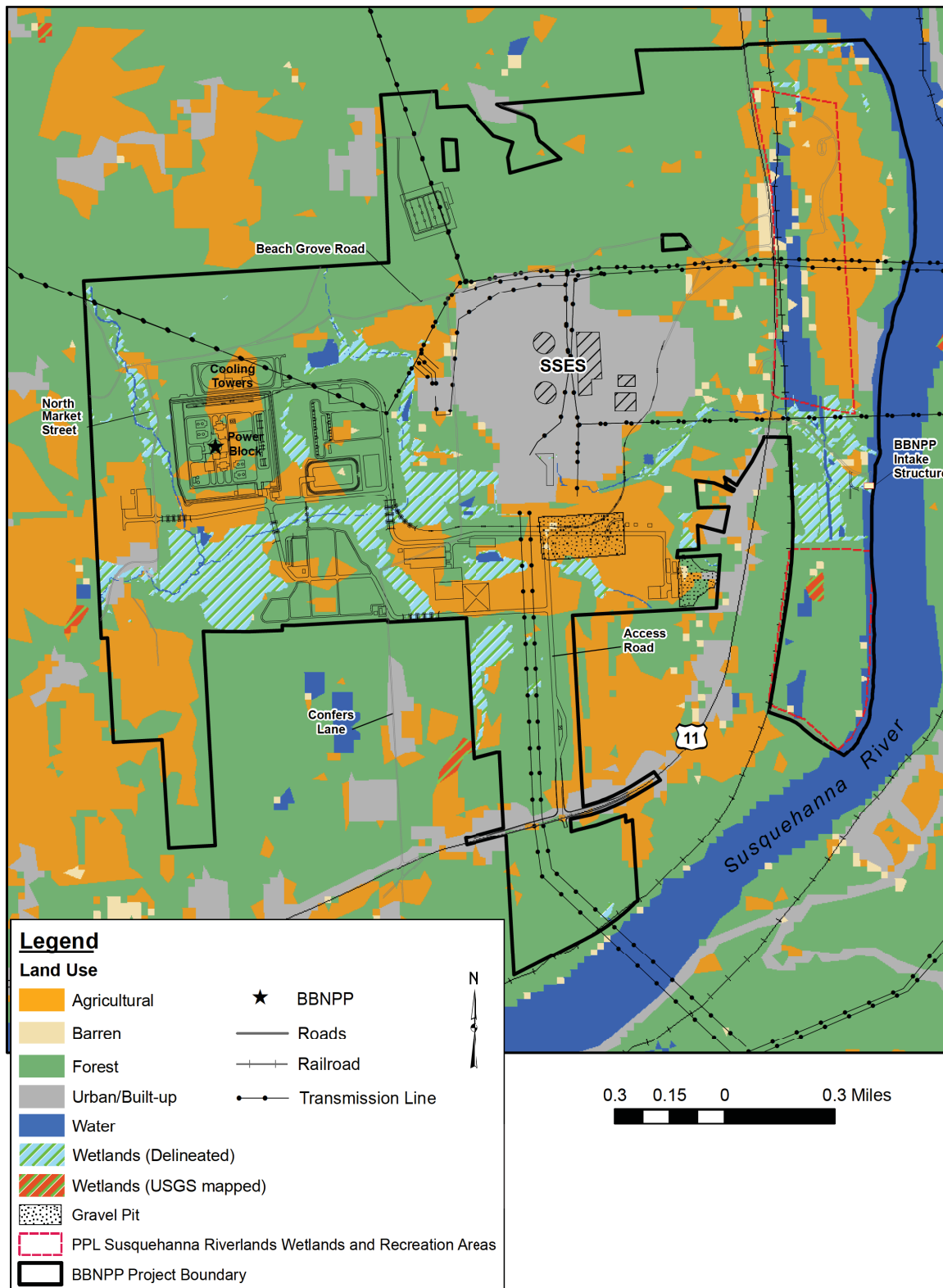
**Figure 2.2-1— Land Use within the BBNPP Project Boundary**

Figure 2.2-2— BBNPP 6 mi (10 km) Land Use

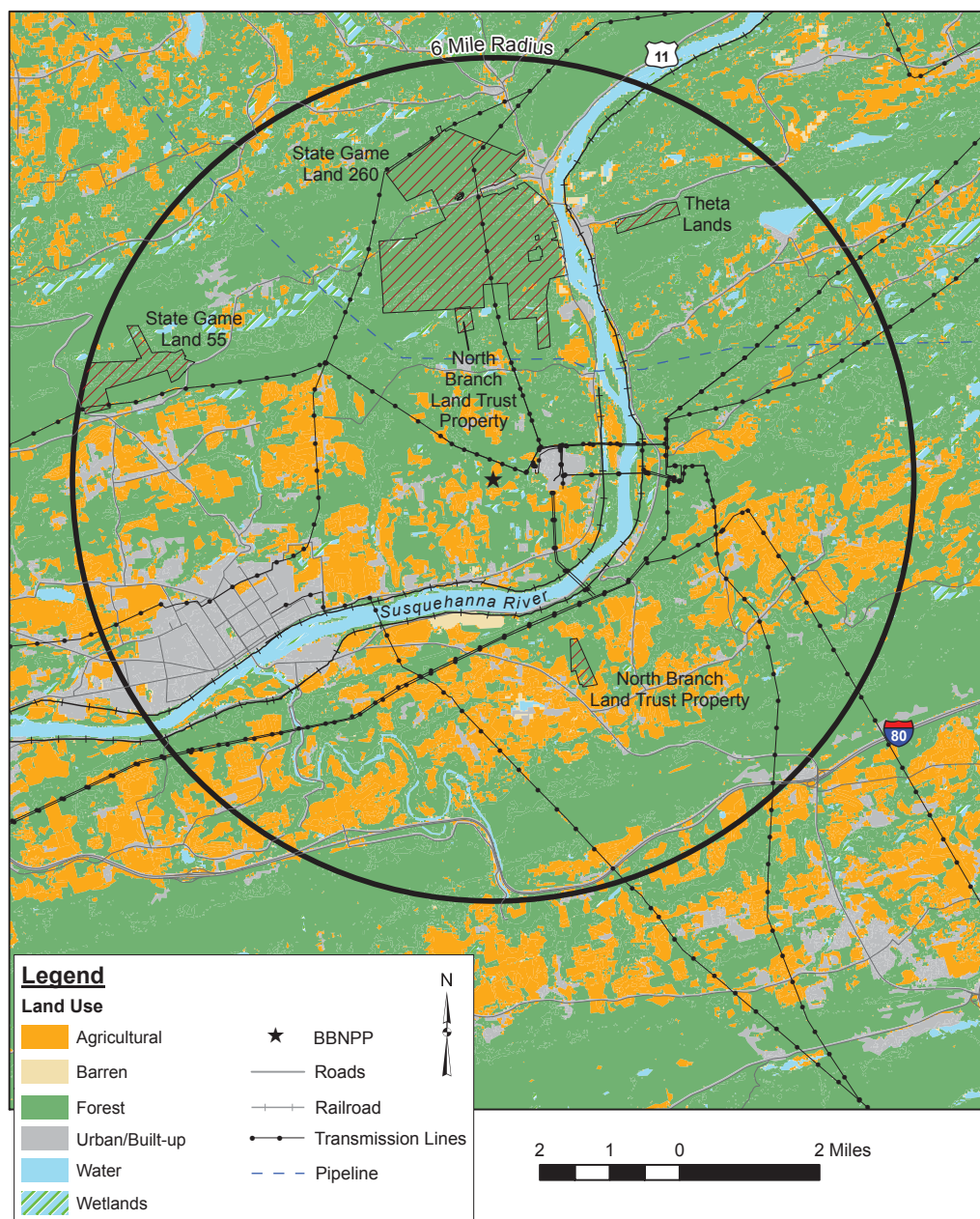
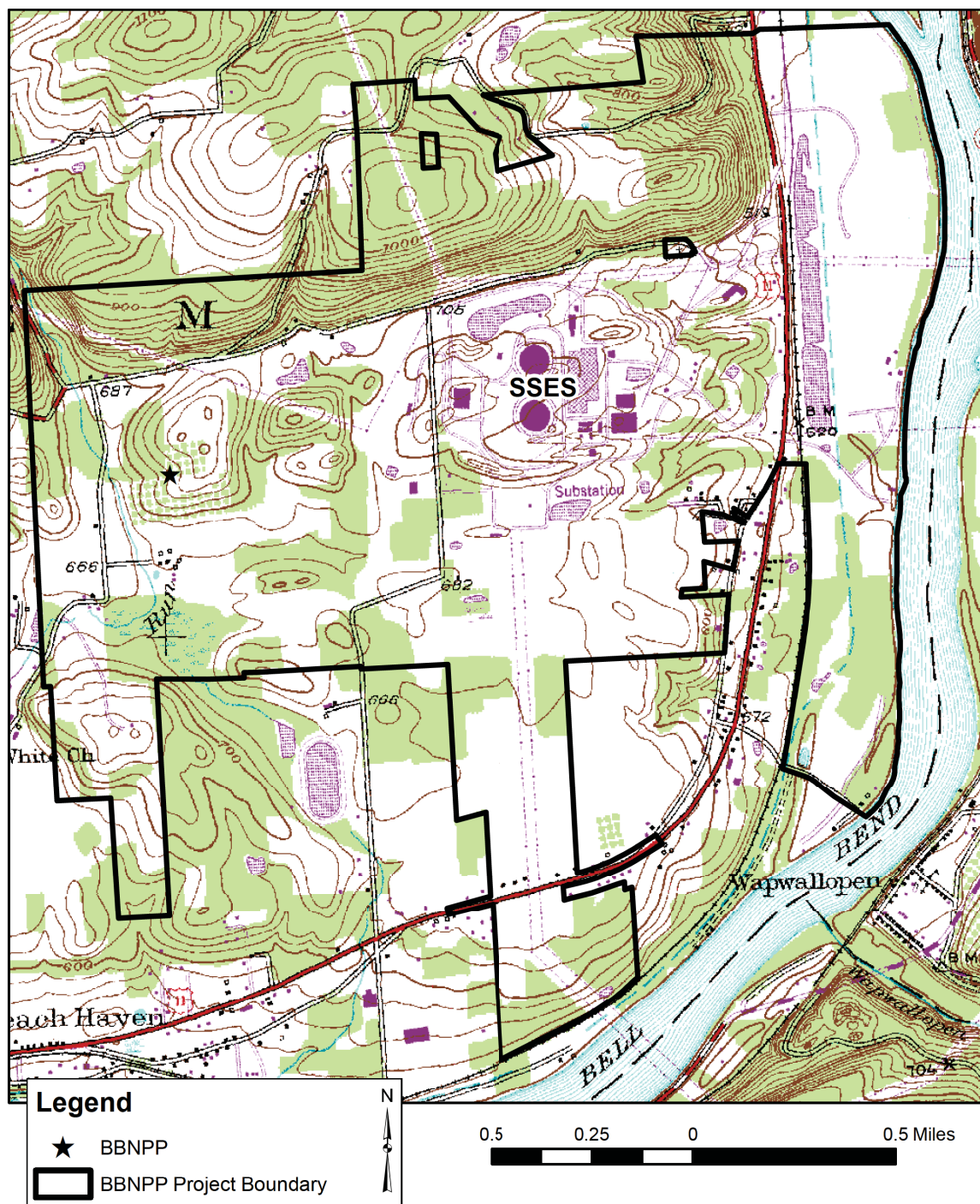


Figure 2.2-3— BBNPP Site Topographic Map





**Figure 2.2-4— BBNPP Site Zoning Map**

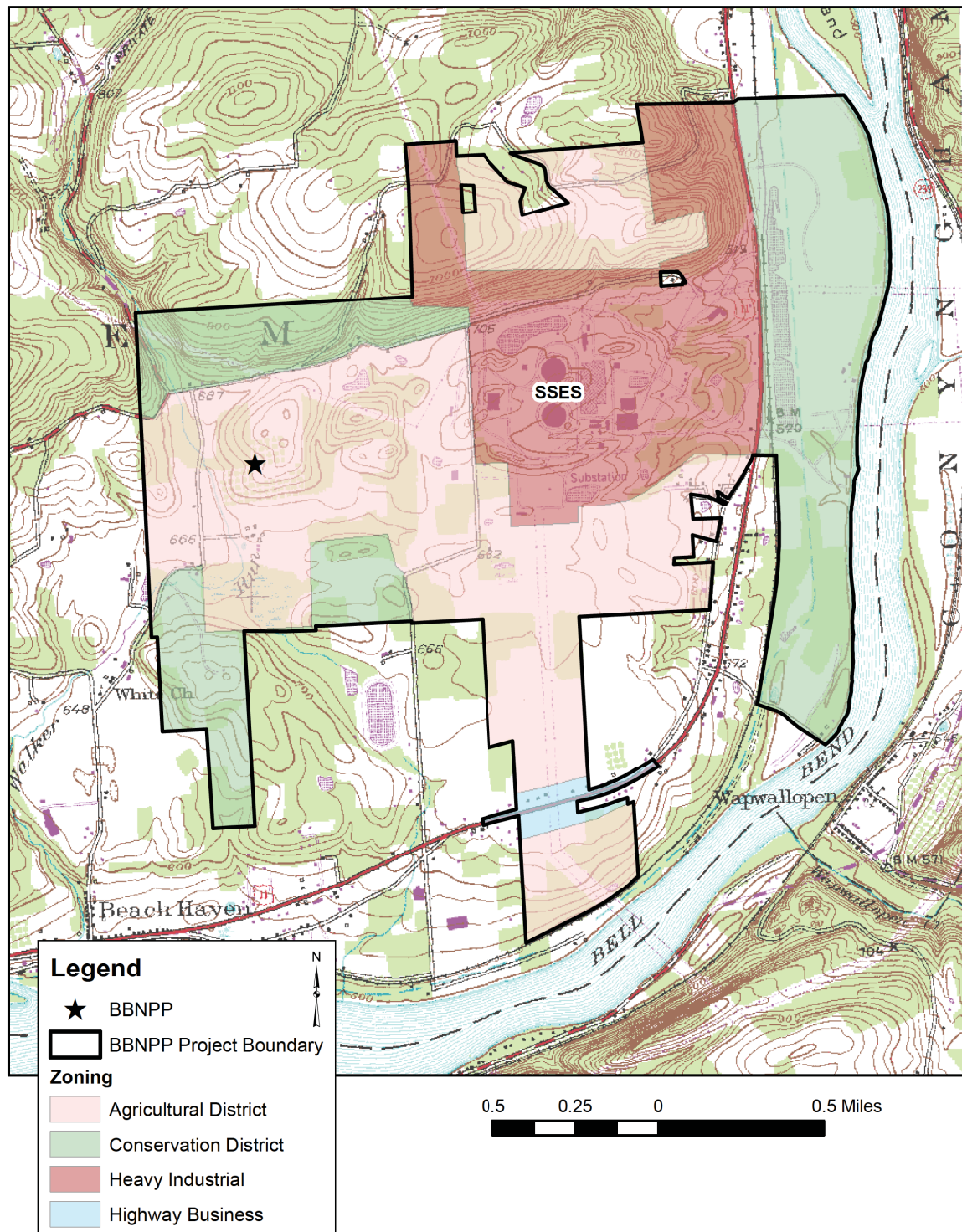


Figure 2.2-5 — BBNPP Site 500 kV and 230 kV Regional Circuit Corridors

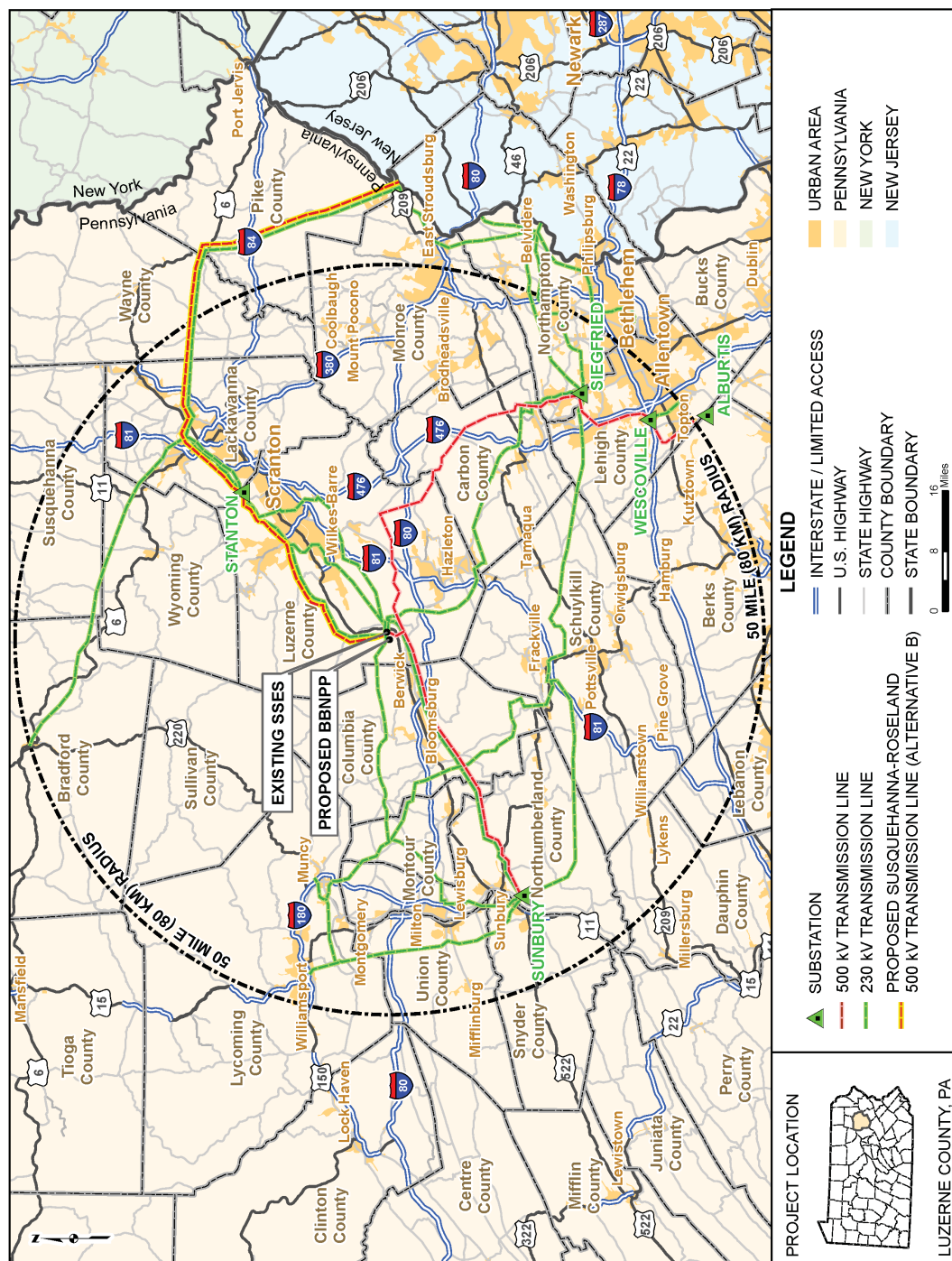
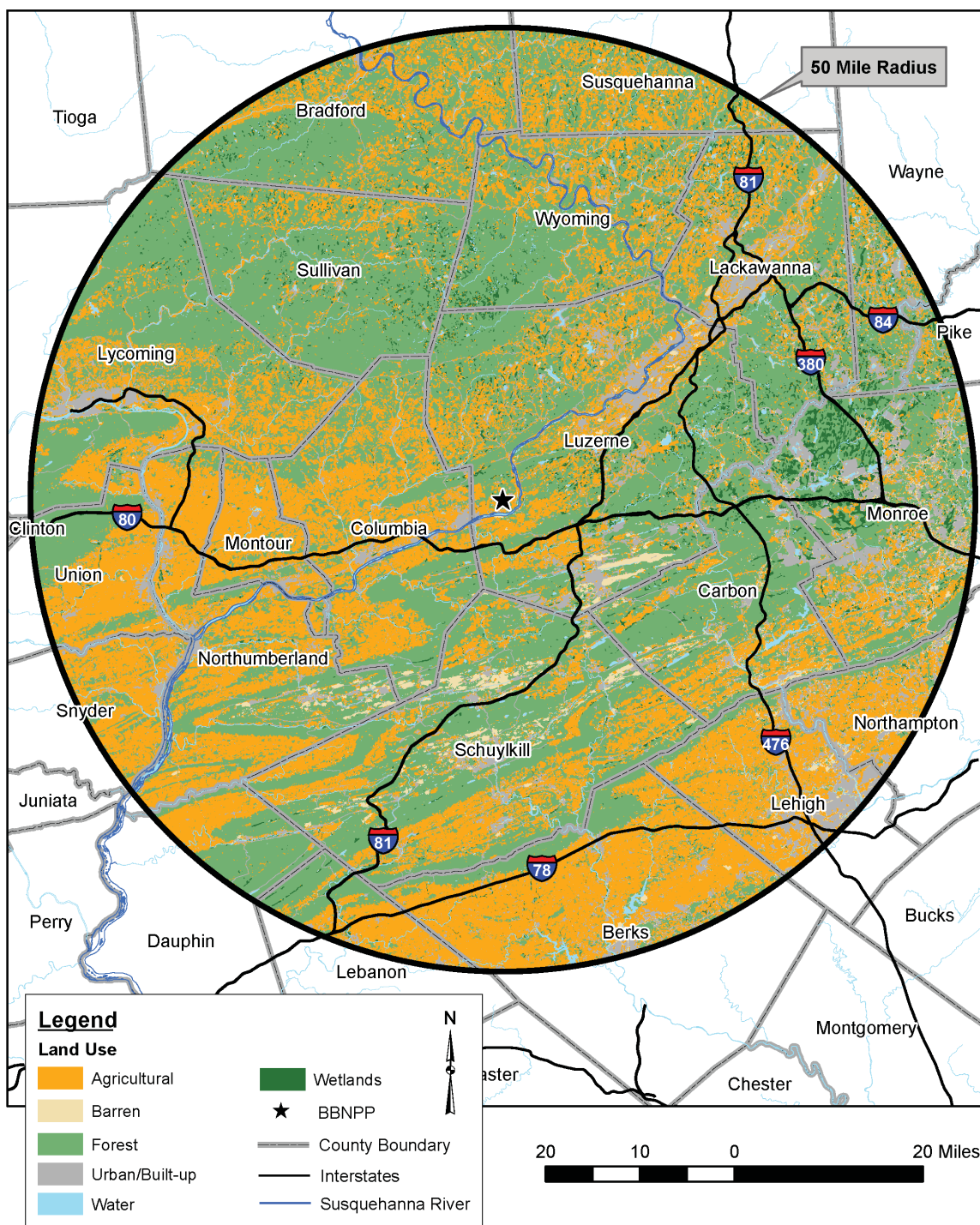




Figure 2.2-6— BBNPP Land Use within a 50 mi (80 km) Radius



**Figure 2.2-7— BBNPP Major Public and Trust Land in 50 mile (80 km) Region**