

2.4 Description of the No Action and Action Alternatives

The alternatives described below represent a range of scenarios that could be implemented at Eufaula Lake to revise shoreline allocations and MP land use classifications, change policies related to vegetation management along the shoreline, and grant site-specific zoning requests and requests for leases of government property. In addition to fulfilling NEPA requirements, analysis of the No Action and action alternatives described below represent a broad range of potential outcomes and associated environmental impacts that could occur as a result of potential zoning and policy changes.

Each action alternative described in Section 2.4 considers rezoning areas of the USACE-owned shoreline. The No Action Alternative would maintain the current shoreline allocations found in the 1998 SMP and the existing baseline condition of land management.

2.4.1 Summary of Alternatives

2.4.1.1 Shoreline Allocations and Land Use Classifications by Alternative

The following tables and graphs present a summary of shoreline allocations and vegetation management policy options under the No Action and action alternatives. **Table 2-7** and **Figure 2-18** summarize the overall miles of shoreline in each shoreline allocation for each alternative. **Table 2-7** also shows the percent change as compared to the No Action Alternative. **Table 2-8** summarizes the Master Plan land use classifications in acres for each alternative and the percent change as compared to the No Action Alternative. The specific components of each alternative are described in detail in Section 2.4.2.

Alternatives 1 and 2 would generally result in an increase in Protected allocations and a decrease in Limited Development allocations. Alternative 1 would result in the greatest decrease in Limited Development. Alternatives 3 and 4 would result in an increase in Limited Development allocations with a corresponding decrease in Protected allocations. Alternative 4 would result in the greatest increase in Limited Development. Alternative 4 is the only alternative that would result in a change in Public Recreation allocation as it would increase the shoreline miles allocated to Public Recreation by seven percent.

Table 2-7. SMP Shoreline Allocations (miles) by Alternative Compared to the No Action Alternative

Shoreline Designation	No Action	Alternative 1		Alternative 2		Alternative 3		Alternative 4	
	Miles ¹	Miles ¹	Percent Change ²	Miles ¹	Percent change ²	Miles ¹	Percent change ²	Miles ¹	Percent change ²
Limited Development	271	42	-85	182	-33	367	+35	479	+77
Protected ³	430	657	+53	517	+20	332	-23	214	-50
Unencumbered	216	443	+105	303	+40	118	-45	0	-100
Encumbered	214	214	0	214	0	214	0	214	0
Public Recreation	106	108 ⁴	+2	108 ⁴	+2	108 ⁴	+2	114 ⁴	+7
Prohibited	1	1	0	1	0	1	0	1	0

Legend:

	Decrease in shoreline allocation
	Increase in shoreline allocation
	No change in shoreline allocation

*1 - Miles of USACE-owned shoreline**2 - Percent change as compared to the No Action Alternative, which is the existing condition**3 – Encumbered Protected shorelands are those areas that USACE has leased or licensed to another agency or organization. Most of these are lands that are licensed to ODWC for fishing and hunting purposes.**4 – A map correction to correctly account for Onapa Cove under the action alternatives would result in an increase of two miles of shoreline allocated to Public Recreation. Additional increases in Public Recreation under Alternative 4 would be due to changes at Carlton Landing and for individual zoning requests 3 and 9.***Note:** *There are slight variations in the total miles between alternatives due to the size of the study area and imprecision in the input data which result minor differences in registration between the GIS map layers used in the development of each alternative.*

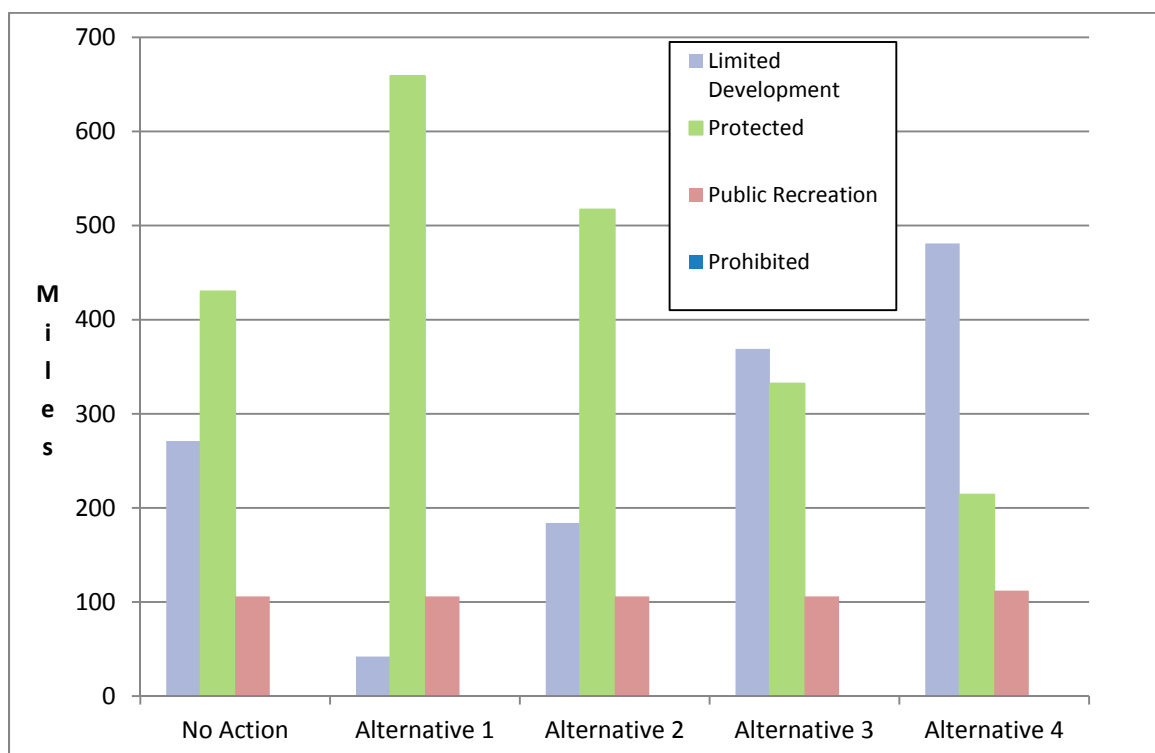


Figure 2-18. SMP Shoreline Allocations (Miles) by Alternative

Table 2-8. MP Land Use Classifications (acres) by Alternative Compared to the No Action Alternative

Land Use Classifications (SMP Shoreline Designation)	No Action	Alternative 1		Alternative 2		Alternative 3		Alternative 4	
	Acres ¹	Acres ¹	Percent Change ²	Acres ¹	Percent change ²	Acres ¹	Percent change ²	Acres ¹	Percent change ²
Operations (Prohibited)	133	133	0	133	0	133	0	133	0
High Density Recreation (Public Recreation)	10,533 ³	10,533	0	10,533	0	10,533	0	10,836	+3
Wildlife Management (Protected)	29,712	29,712	0	29,712	0	29,712	0	29,712	0
Environmentally Sensitive Areas and Vegetation Management (Protected)	5,070	5,070	0	5,070	0	5,070	0	0	-100
Low Density Recreation (Protected)	9,209	18,334	+99	14,051	+53	2,899	-69	0	-100
Low Density Recreation (Limited Development)	10,209	1,084	-89	5,367	-47	16,777	+64	24,659	+142
Future/Inactive Recreation (Protected)	474 ³	474	0	474	0	216	-54	0	-100
Easement Lands (Flowage easements)	31,667	31,667	0	31,667	0	31,667	0	31,667	0

Legend:

	Decrease in land classification allocation
	Increase in land classification allocation
	No change in land classification allocation

1 - Acres of government lands between the shoreline (at conservation pool) and the upland boundary of the USACE-owned lands; except for easement lands which are areas upland from the lands owned in fee simple and are lands over which USACE only holds an easement for certain flood management activities.

2 - Percent change as compared to the No Action Alternative, which is the existing condition.

3 - Under the current MP there are four areas totaling 474 acres that are designated as High Density Recreation; however, these areas have not been developed and are managed as though they were classified "Future/Inactive Recreation". They are shown under Future/Inactive Recreation.

Note: There are slight variations in the total acres between alternatives due to the size of the study area and imprecision in the input data which result minor differences in registration between the GIS map layers used in the development of each alternative.

2.4.1.2 Vegetation Management Zone Policies by Alternative

Both the baseline and extended buffer vegetation management zone policies would provide for protection of shoreline vegetation and soils within specified distances of the shoreline. Each vegetation management zone is characterized by a specific buffer width and these policies would only apply to Limited Development allocated shoreline areas. Vegetation modification may be allowed in areas adjacent to Protected shorelines, but this is limited to firebreaks and minor clearing that may be needed for informal access paths. Therefore, the proposed vegetation management zone policies, which would require the preservation of a buffer of natural vegetation between the water and the extent of the area being mowed, would only apply to areas adjacent to Limited Development shorelines.

The miles of shoreline within each zone are summarized by alternative in **Table 2-9** and by acres in **Table 2-10**. The miles and acreages in each zone would vary by alternative in relation to the amount of Limited Development shoreline allocations under each alternative. **Table 2-10** shows the number of acres of USACE-owned lands over which each buffer zone is applied. Therefore, a portion of this area could be mowed or have other vegetation management practices applied to it with an approved vegetation management permit.

The vegetation management zones policy would not apply to the No Action Alternative, so it is not included in **Table 2-9** or **2-10**.

Where the government lands are a very narrow band that does not have sufficient width to accommodate either the applicable buffer zone or a standard fire break, the allowable shoreline vegetation modifications would be evaluated on a case by case basis. “Firebreaks” allowed under a shoreline use permit for vegetation modification only allow mowing, clearing of trees less than 4 inches in diameter, and limbing of trees up to 8 feet above the ground. In addition, where high quality habitat occurs that could be impacted by vegetation modification, mowing may be restricted to no more than the first 30- feet of government land immediately adjacent to the private property for fire break purposes only. This would also be determined on a case by case basis.

Table 2-9. Vegetation Management Zones by Action Alternative (miles of shoreline)¹

	Proposed Buffer Width(feet) ²									Fire-break only ³	No Mowing	Total
	20	30	35	45	55	60	70	80	95			
Alternative 1 (extended)	N/A	N/A	N/A	0	1	0	37	2	1	0	1	42
Alternative 2 (extended)	N/A	N/A	N/A	0	6	0	159	6	9	1	1	182
Alternative 3 (baseline)	0	11	0	312	7	N/A	24	N/A	N/A	1	12	367
Alternative 4 (baseline)	0	20	0	395	7	N/A	41	N/A	N/A	5	11	479

N/A = Not Applicable – this buffer width does not occur under this alternative

1 – Vegetation Management Zone policy only applies to shorelines designated as Limited Development.

2 - Buffer widths are based on a combination of slope, soil type, and vegetation cover as described in Section 2.3.2. Buffers would be measured inland from the natural vegetation line above the normal conservation pool elevation.

3 – Permits for all vegetation management are issued on a case by case basis including for the creation of firebreaks. Firebreak width would be determined based on a review of site specific conditions.

Table 2-10. Vegetation Management Zones by Action Alternative (acres) ¹

	Proposed Buffer Width (feet) ²									Fire-break only ³	No Mowing	Total
	20	30	35	45	55	60	70	80	95			
Alternative 1 (extended buffers)	N/A	N/A	N/A	0	14	0	943	60	37	0	30	1,084
Alternative 2 (extended buffers)	N/A	N/A	N/A	0	159	0	4,325	432	338	47	66	5,367
Alternative 3 (baseline buffers)	0	352	0	12,270	441	N/A	1,318	N/A	N/A	141	1,997	16,519
Alternative 4 (baseline buffers)	0	1,075	0	17,305	580	N/A	2,980	N/A	N/A	661	2,081	24,682

N/A = Not Applicable – this buffer width does not occur under this alternative

1 – Vegetation Management Zone policy only applies to shorelines designated as Limited Development.

2 - Buffer widths are based on a combination of slope, soil type, and vegetation cover as described in Section 2.3.2. Buffers would be measured inland from the natural vegetation line above the normal conservation pool elevation.

3 – Permits for all vegetation management are issued on a case by case basis including for the creation of firebreaks. Firebreak width would be determined based on a review of site specific conditions.

2.4.1.3 Potential Boat Docks by Alternative

One of the key components in determining impacts is the number and density of boat docks. Private boat docks may only be permitted along shorelines allocated as Limited Development. The shoreline management regulations limit the amount of shoreline that can be developed to 50 percent of the area allocated as Limited Development (36 CFR 327.30). Therefore, the number of shoreline miles is first divided in half before calculating the maximum number of docks that could potentially be constructed.

USACE regulations further require boat docks to be placed a minimum of 50 feet from other docks. Although in reality, the average distance between docks tends to be greater than 50 feet because of factors such as irregular shorelines or shallow water depths, this 50-foot spacing provides a maximum density.

The average boat dock width at Eufaula Lake is 31.8 feet. If the docks are spaced 50 feet apart, then there would be a minimum of 81.8 feet of shoreline length per boat dock. The maximum potential number of boat docks by alternative is then calculated as follows:

- Miles of shoreline allocated as Limited Development divided by 2
- 1 mile = 5,280 feet
- Average dock width at Eufaula Lake = 31.8 feet
- Required dock spacing = 50 feet between docks

- Minimum amount of space per dock = 81.8 feet
- Maximum number of docks = Feet of Limited Development Shoreline/minimum space per dock

Table 2-11 summarizes the maximum potential number of private and community boat docks that could theoretically be constructed under each alternative. The actual number would be considerably less due to the physical constraints of the shoreline.

Table 2-11. Maximum Potential Number of Private Boat Docks Under Each Alternative

Alternative	Limited Development Shoreline (miles)	Miles Available for Dock Construction	Limited Development Shoreline (feet)	Maximum Number of Docks ¹
No Action	271	135.5	715,440	8,746
Alternative 1	42	21	110,880	1,355 ²
Alternative 2	182	91	480,480	5,873
Alternative 3	367	183.5	968,880	11,844
Alternative 4	479	239.5	1,264,560	15,459

¹ - The maximum potential number of docks that could be built under each alternative is based on an average width of 31.8 feet and a minimum dock spacing of 50 feet.

² - Although this value is less than the total number of existing docks, over half of the existing docks (908) are located outside of areas that would be designated as Limited Development under Alternative 1. A closer analysis of the individual segments that would be allocated as Limited Development under Alternative 1 reveals that an additional 605 docks could be constructed along the Limited Development shorelines under Alternative 1 for a total potential number of 2,278 docks.

In addition, the rate at which new boat docks are constructed needs to be considered in determining a reasonable future number of boat docks. Many USACE lakes experience a slow initial growth in the number of docks and then as the area becomes established and the housing market matures, the rate at which new docks are constructed increases. At Eufaula Lake, the number of boat docks at several points in time is shown in **Table 2-12** and the average number of boat docks per year is shown for each time period. It appears that the number of docks constructed experienced a surge in the early 1980s, but that the rate of new construction has increased at a much lower 10 percent over the past two decades. Assuming that this trend continues, it is possible to make a prediction about how long it might take to achieve full build out and about the number of boat docks that might be reasonably expected in the near future of 20 years.

Table 2-12. Historical Growth in Boat Dock Numbers

Year ¹	Number of Boat Docks	Average Number Constructed Per Year from Prior Date	Increase in Rate
1976	365		
1981	452	17.4	
1986	630	35.6	100%
1998	1100	39.2	10%
2011	1673	44.1	12%

¹ - The years evaluated include the values reported in each SMP revision plus the number of current docks as of 2011.

Table 2-13. Predicted Growth in Boat Docks over Next 20 Years

Year	Average Number Constructed Per Year ¹	Predicted Number of Boat Docks
2016	48.5	1,916
2021	53.4	2,183
2026	58.7	2,477
2031	64.6	2,800

1 – assumes that the rate at which boat docks are constructed continues to increase according to historic trends.

Another method of calculating potential growth is to use the historical residential growth rate of 3 subdivisions per year with a total of approximately 123 lots per year. Over the next 20 years, this would result in 2,460 new lots, not all of which would be waterfront lots with the potential to construct docks. However, consistent with historical development patterns in the study area, it is reasonable to assume that many of those potential subdivisions would be sited adjacent to the lake in order to take advantage of the amenities offered by lake access and the potential for private or community docks. Using the historical growth rate of residential development, the potential number of new docks over the next 20 years would be similar to the value calculated based on historical trends in dock approval rates.

Over a longer time frame, such as the next 100 years, historical patterns of residential growth would result in fewer potential docks constructed than are predicted using historical trends in dock approval rates. This means that using the dock approval rates results in a faster “build out” to the maximum number of potential docks. A faster build out would place greater stress on the resource categories evaluated sooner than would occur if the residential growth rate is applied. Therefore, the historical rate of dock approvals will be used as the more conservative measure of potential impacts.

2.4.2 No Action Alternative

NEPA requires the alternatives analysis to include the No Action Alternative (40 CFR 1502.14(d)). With respect to the SMP revision and MP supplement, “no action” would mean “no change” from current management direction or level of management intensity. Under the No Action Alternative, there would be no change to the existing shoreline allocations or land use classifications under the MP, none of the pending zoning requests would be granted, there would be no change to the vegetation management policies, and the MP would continue to be out-of-date with respect to the SMP. With respect to the proposed development project at Carlton Landing, “no action” would mean that the grant of a lease would not be approved and proposed public shoreline recreational facilities on government lands would not be permitted. This would have implications for the proposed development on the private lands. Thus, the No Action Alternative represents the future state of the environment without any of the alternatives. The No Action Alternative is evaluated in detail in this EIS. This No Action Alternative serves as the baseline for comparison when assessing the potential impacts of the other alternatives.

The No Action Alternative includes the following main components:

- Existing shoreline allocations under the SMP would not change.
- MP land use classifications maps would not be revised to be consistent with the 1998 SMP shoreline allocations. Although the maps would not be revised, land would continue to be managed as though the MP were consistent with the 1998 SMP. This is the existing baseline condition with respect to land management.

- Existing vegetation management policies would not change.
- The lease request for a public marina and other public recreation facilities at Carlton Landing would not be approved.
- No action would be taken on the individual zoning requests submitted during scoping to change shoreline allocations.

2.4.2.1 Shoreline Allocations and Land Use Classifications

Under the No Action Alternative, the existing distribution of shoreline allocations would remain unchanged. None of the individual zoning requests received during public scoping would be approved and the rezone request related to proposed shoreline development at Carlton Landing would also not be approved with associated consequences for the proposed development on private lands (described in further detail below).

The miles of each shoreline allocation under the No Action Alternative are summarized in **Table 2-1**. Land use classifications under the MP and the number of acres under the baseline condition are provided in **Table 2-2**. Existing shoreline allocations would not change under the No Action Alternative. The MP maps would not be revised and so would remain inconsistent with the 1998 SMP and existing land management.

The location and extent of each shoreline allocation is shown on **Figures 2-1** through **2-7**.

The areas allocated as Limited Development would be the areas where the greatest potential for shoreline effects would occur. The Limited Development areas are where private shoreline uses such as boat docks may be allowed and/or where shoreline vegetation may be modified with a shoreline use permit. Currently there are 1,673 private and community docks along Limited Development shorelines. Under the No Action Alternative, which would maintain the current 271 miles of Limited Development allocated shoreline, there could be a potential maximum of 8,746 docks. While the actual number would likely be considerably less due to the physical constraints of the shoreline, this maximum build out scenario illustrates that there is considerable potential for growth in the number of docks under the No Action Alternative.

Using the historical growth rate of 10 percent applied to the average number of docks constructed over each five year period to project future growth in dock numbers, the maximum potential number of docks allowed under the No Action Alternative would be reached in just over 70 years. While USACE lakes typically start with a slow build up in the numbers of boat docks followed by what seems like an exponential increase, a growth rate that continues to compound over a span of 70 years or more is also probably unrealistic. Therefore, it is likely that full build-out would take much longer than estimated here.

Another limitation on the total number of boat docks and/or the timing at which that number might be reached is the processing time needed to review and approve shoreline permits. Under the projected growth rate in permit applications, the Eufaula Lake Project Office would need to process almost 170 new applications a year during the final decade. This is almost four times more than the number of new permits for docks that are currently processed annually. The number of staff that would be required to process the new applications in addition to dock renewal permits and required inspections (approximately 20 percent of existing dock permits are renewed each year) would indicate that reaching a milestone of over 8,700 docks in approximately 70 years is unlikely.

2.4.2.2 Vegetation Management Policies

Under the No Action Alternative, there would be no change to the existing vegetation modification policies. Under existing conditions, in the 1998 SMP, permit applications for modification of vegetation along the shoreline are considered on a case by case basis by the Lake Manager. When issued, a vegetative modification permit may allow mowing of an area from the private property to the shoreline within the width of the private property extended onto the public land. When there is significant wildlife or scenic/aesthetic areas that could be impacted by mowing, the mowing is required to be restricted to no more than a 30-foot strip of public property adjacent to the private property. Current regulations restrict the removal of any flowering trees or shrubs, regardless of the size, as well as trees or shrubs larger than 4 inches in diameter.

Policies related to land-based shoreline uses, and erosion control activities under the No Action Alternative would remain the same as those outlined in the 1998 SMP. Policies related to the trimming of trees and the burning of dead or downed timber would also remain unchanged.

2.4.2.3 Proposed Carlton Landing Development (No Action Alternative)

As described above, the No Action Alternative would result in no change to the existing SMP allocations or MP land classifications around Eufaula Lake. Additionally, under the No Action Alternative, the lease agreement required for construction and operation of the proposed public marina and other public recreation features at Carlton Landing would not be granted by USACE.

Under the existing conditions, USACE-owned land along the shoreline in the area of Carlton Landing (including Roundtree Landing) is designated as Protected (approximately 5.8 miles of shoreline and 301 acres) (**Figure 2-3**). The MP land use classification is partially High Density Recreation (258 acres), which is in conflict with the SMP allocation, and partially Low Density Recreation (43 acres), which is consistent with the SMP. Current management treats the area as though it were classified Future/Inactive Recreation which is consistent with the SMP designation. Under the No Action Alternative, the shoreline allocation, the land use classification, and the current management practice would not change.

Limited Development shoreline areas and some docks exist across Longtown Arm on the south side of the lake from the Carlton Landing development. Some of this area on the south side of Longtown Arm is also owned by Humphreys Partners 2009 LLC and currently contains a dock that is being used by the Carlton Landing development. With implementation of the No Action Alternative, the proposed Carlton Landing development request to change the shoreline allocation along Roundtree Landing and on the north side of Longtown Arm in the vicinity of Carlton Landing from Protected to Public Recreation would not be approved by USACE. The existing dock on the south side of Longtown Arm would remain and there would continue to be the possibility for permitting of additional private docks on the south side of the arm (Area L on **Figure 2-11**). In addition, the boat valet service connecting the north and south sides of Longtown Arm would remain.

The private lands in the vicinity of the proposed “town center” for Carlton Landing extend below the shoreline elevation of 585 feet above mean sea level. Therefore, public use of and access to the shoreline in this area would not be regulated under the SMP; although the Protected shoreline designation would not allow docks to be constructed in this area (Area F on **Figure 2-11**). The town center area comprises approximately 4 percent (approximately 0.25 miles) of the overall shoreline bordering Carlton Landing (Humphreys 2011).

Implementation of the No Action Alternative and continuation of existing zoning, would allow for continued access to one community dock on the south side of Longtown Creek which currently provides for approximately 15 boat slips. This would accommodate lake and boating access for approximately 15 to 20 Carlton Landing homes compared to the 275-300 boat slip marina proposed under full build-out (described in Alternative 4). While there would be the possibility of constructing another dock on the south side of Longtown Creek to accommodate additional individual boat slips, the limited access would make them less attractive to homeowners on the north side of the lake and the number of boats that could be accommodated would be considerably less than with the proposed marina. In addition, the public benefits of the proposed marina facilities would not be realized further limiting public recreational opportunities in this part of the lake.

Under the No Action Alternative, land-side residential and commercial development would be limited to the first phase, which began in early 2011. The first lots under development are those closest to the lake on the north side of Longtown Creek (southeastern part of Carlton Landing's master plan area). **Figure 2-8** shows the general layout of Carlton Landing. The first phase of development is planned to consist of approximately 170 residential lots, a conference and retreat facility, community parks and green spaces, one community swimming pool, and commercial/multi-family areas. Some of the residential lots (approximately 4 to 10) would be developed with multifamily units, making the number of residential units greater than the total number of lots. The commercial/multi-family development would consist of a mixture of mixed-use condominium or apartment units, live-work units, and 2-bedroom units that could be split into two separate units, for a total potential of 152 multifamily units.

As described above, the continuation of existing zoning under the No Action Alternative would not allow for boating access from the current master plan community area. As boating access from this area would be one of the main attractions for interested home buyers, it is assumed that implementation of the No Action Alternative would limit development at Carlton Landing, as described above, to the initial 170 lots. In addition, the shoreline would not be developed or available to the public for recreational activities such as walking, camping, swimming, horseback riding, and bicycling. The USACE-owned lands would continue to provide habitat for wildlife and fishing access.

The majority of the development under the No Action Alternative is planned to be residential (up to 170 lots total). Commercial activity would be limited to work-from-home businesses, restaurants that could fit into single-family residential building types, and commercial kiosks/food trucks. This would limit the ability of the development to provide the full range of proposed community amenities such as private security and a concentration of businesses that would allow many residents to live within walking distance of services.

2.4.3 Alternative 1

Alternative 1 includes the Limited Development shoreline allocations as they existed under the 1981 SMP before the area of Limited Development was significantly expanded in subsequent revisions. This alternative includes changes to the MP "Low Density Recreation" land classification to be consistent with the Limited Development shoreline allocation of the 1981 SMP. This alternative represents the end of the range of alternatives that emphasizes natural resource conservation over private shoreline uses and recreational development opportunities. Alternative 1 includes the following main components:

- Limited Development shoreline allocations would be reduced to only those areas that were mapped as Limited Development in the 1981 SMP and the MP land classification “low density recreation” would be applied to those areas.
- Limited Development areas not designated as Limited Development in the 1981 SMP would be converted to Protected and areas classified as “low density recreation” in the MP would be changed to another “multiple resource management” classification to be consistent with that shoreline allocation.
- MP land use classification maps would be revised to be consistent with the SMP shoreline allocations.
- Existing permitted facilities in areas that would be converted from Limited Development to Protected would be grandfathered until the facilities fail to meet the criteria set forth in 36 CFR 327.30(h).
- The vegetation management policies would be changed to apply the extended buffer vegetation management zone policies.
- The request for Public Recreation shoreline allocation at Carlton Landing would not be approved.
- The lease request for a public marina and other recreational amenities at Carlton Landing would not be granted.
- Individual zoning requests would not be approved and some requests to maintain Limited Development would be reversed to Protected allocations.

2.4.3.1 Shoreline Allocations and Land Use Classifications

Alternative 1 includes the Limited Development allocations as they existed in the 1981 SMP. The 1986 and 1998 SMP revisions resulted in increases in Limited Development zoning around the lake. Potential direct, indirect, and cumulative impacts of those changes to the shoreline were not evaluated under NEPA at the time of either SMP revision. Thus, Alternative 1 would evaluate the effect of changing the shoreline allocations to those that were present under the 1981 SMP. **Figures 2-19** through **2-25** illustrate the shoreline allocations proposed under Alternative 1.

Under Alternative 1, Limited Development shoreline miles would be reduced from 271 to 42 miles and Protected shoreline miles would be increased from 430 miles to 657 miles (**Table 2-7**). While the total acres classified as Low Density Recreation would not change, the acreage associated with Limited Development shorelines would decrease from 10,209 acres to 1,084 acres and the acreage associated with Protected shorelines would increase from 9,209 to 18,334 acres (**Table 2-8**). There would be two additional miles allocated to Public Recreation to properly account for Onapa Cove, and the undeveloped High Density Recreation areas would be reclassified in the revised MP as Future/Inactive Recreation. There would be no change in Prohibited allocations (**Tables 2-7** and **2-8**).

Existing permitted facilities in areas that would be converted from Limited Development to Protected would be grandfathered until the facilities fail to meet the criteria set forth in 36 CFR 327.30(h). Those criteria include the conditions that the facilities must be maintained in a safe and useable condition, the facility does not pose a threat to life or property, and the holder of the permit remains in substantial compliance with the permit.

Alternative 1 would reduce the Limited Development allocated shoreline to 42 miles, and the potential maximum number of docks would be 2,278. The 42 miles of shoreline allocated to Limited Development under Alternative 1 would provide sufficient shoreline length for 1,355 docks. Although there are currently 1,673 existing docks on the lake, over half of the existing docks (908) are located outside of areas that would be designated as Limited Development under Alternative 1. A closer analysis of the individual segments that would be allocated as Limited Development under Alternative 1 reveals that there would be sufficient space for an additional 605 docks. The existing docks would be grandfathered; therefore, the total potential number of docks that could potentially be built at the lake under Alternative 1 would be 2,278.

2.4.3.2 Vegetation Management Policies

Under this alternative, the extended buffer vegetation management policy would be implemented. The extended buffer vegetation management zone policy includes the largest buffers proposed to protect shoreline habitats. Based on the criteria in this policy (described in Section 2.3.2), shoreline areas would be categorized into specific buffer distance groups. As shown in **Table 2-3**, the extended buffer vegetation management policy would range from 45 to 95 feet inland from the from the natural vegetation line above the normal conservation pool elevation. In order to limit effects on water quality, vegetation, and wildlife habitat, vegetation management activities would be limited to government land outside of these buffer zones. Where high quality habitat occurs that could be impacted by vegetation modification, mowing may be restricted to no more than the first 30- feet of government land immediately adjacent to the private property for fire break purposes only.

2.4.3.3 Proposed Carlton Landing Development (Alternative 1)

The development at Carlton Landing under Alternative 1 would largely be the same as that described under the No Action Alternative; however, under Alternative 1, the Limited Development designated areas on the south side of Longtown Arm would be rezoned to Protected as they were under the 1981 SMP (Area L shown on **Figure 2-11**). Alternative 1 only affects Limited Development allocated shorelines and thus does not alter the existing allocation of Protected at Roundtree Landing. The MP classification of High Density Recreation on Roundtree Landing would be changed to Future/Inactive Recreation to be consistent with the SMP.

With the transition from Limited Development to Protected zoning, there would be no further development of docks or floating facilities on the south side of Longtown Arm. The existing permitted dock would be grandfathered until such time at it is no longer maintained properly or becomes a public safety hazard [36 CFR 327.30(h)]. There would be no docks or floating facilities allowed on the north side of Longtown Arm under Alternative 1. The Protected shoreline allocation under Alternative 1 would not allow for the development of developed public trails, nature center, public campgrounds, or marina on the government shoreline (**Figure 2-21**). Additionally, the requested lease agreement would not be granted and the proposed public marina and other public shoreline recreational facilities would not be built. The USACE-owned lands would continue to provide habitat for wildlife and fishing access.

As described for the No Action Alternative, the development concept for Carlton Landing is predicated on access to the lake and lake recreation for homeowners in the community. The maintenance of Protected shoreline allocations would limit public recreational use of the shoreline for Carlton Landing residents. As described under the No Action Alternative, this would be expected to result in a final build-out of the 170 lots currently under construction, which would be developed with both multi-family and single-family

residential units, and the limited commercial and community facilities described under the No Action Alternative.

With the transition of Limited Development to Protected zoning on the south side of Longtown Arm, there would be no additional docks constructed on the south side. This would also likely further limit potential residential development in this area. Overall, Alternative 1 would be expected to result in fewer docks and less development on adjacent private lands than the No Action Alternative.

2.4.3.4 Individual Zoning Requests under Alternative 1

Similar to the No Action Alternative, none of the individual zoning requests to change the existing shoreline allocation to another allocation would be approved under Alternative 1. Individual zoning requests #4, 5, 6, and 10 to maintain existing Limited Development allocations would also not be granted as these specific shoreline areas were not designated Limited Development in the 1981 SMP and thus would revert to Protected. However, the existing uses at these locations would be grandfathered and would be allowed to remain as long as the criteria set forth in 36 CFR 327.30(h) are met. Each request is described in detail in Section 2.3.4.

Zoning Request #7 – Lakeview Country Estates V - is a request to retain Limited Development zoning and since this area was designated as Limited Development in the 1981 SMP, it would not change under this or any of the alternatives.

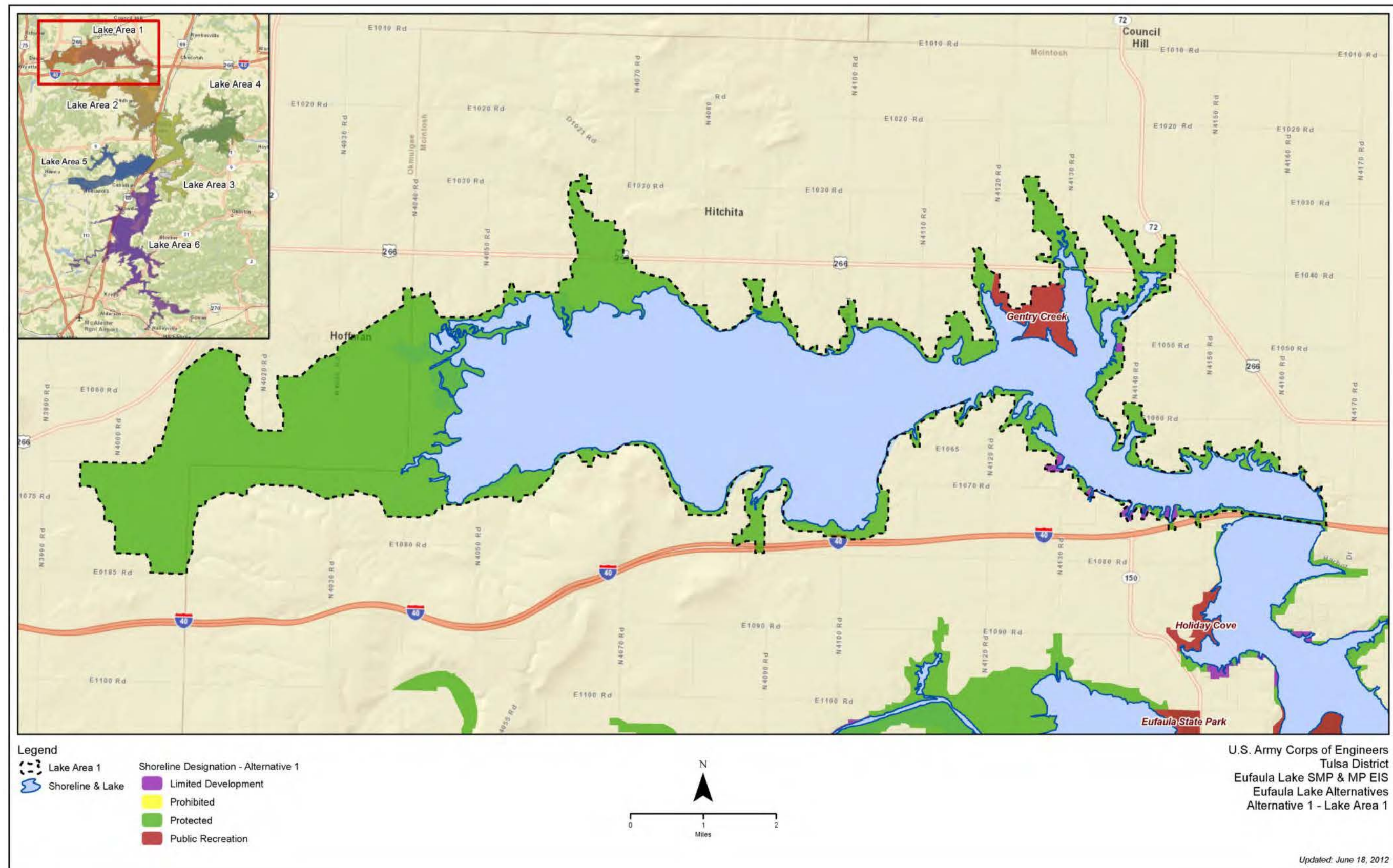


Figure 2-19. Alternative 1 Lake Area 1

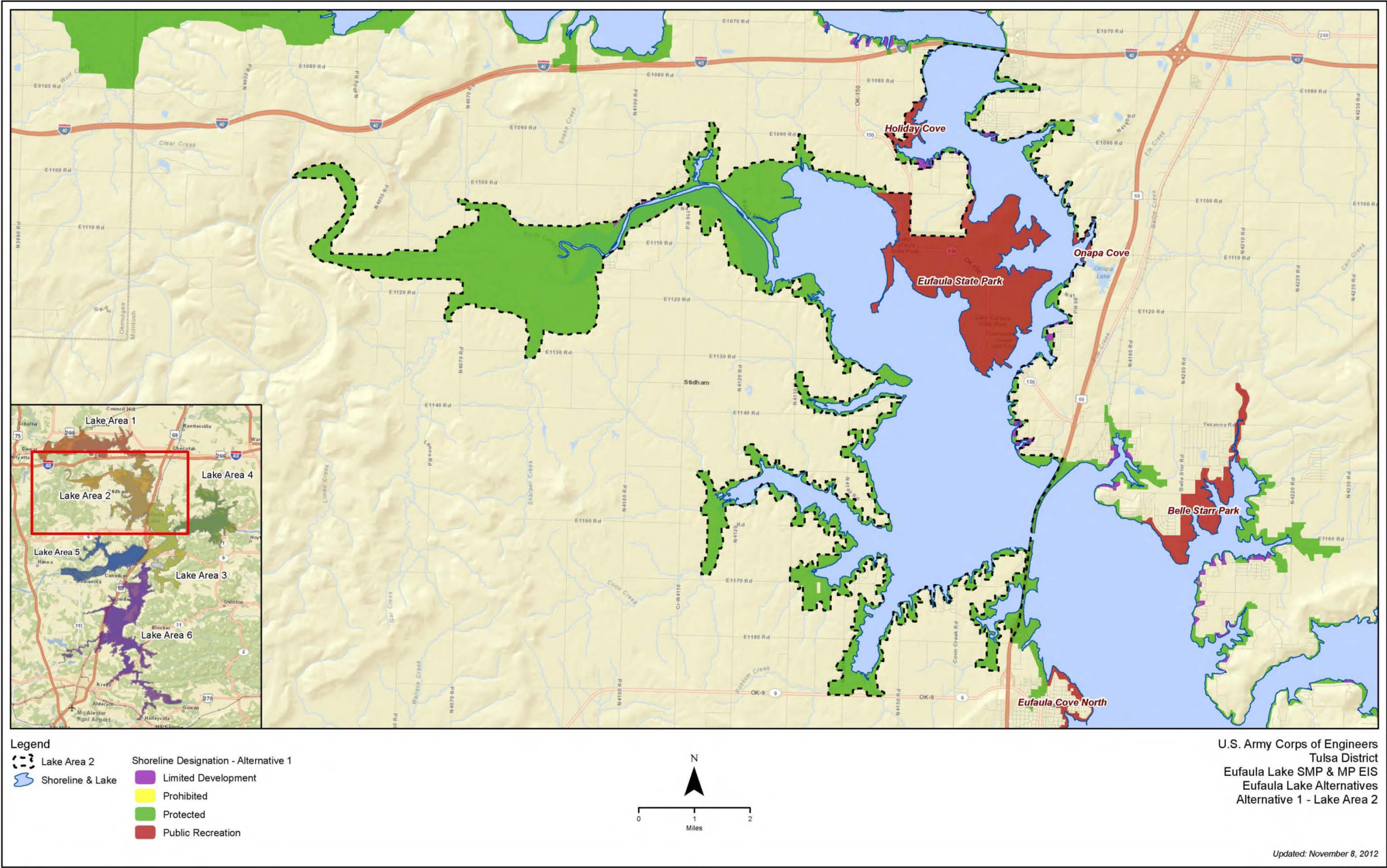


Figure 2-20. Alternative 1 Lake Area 2

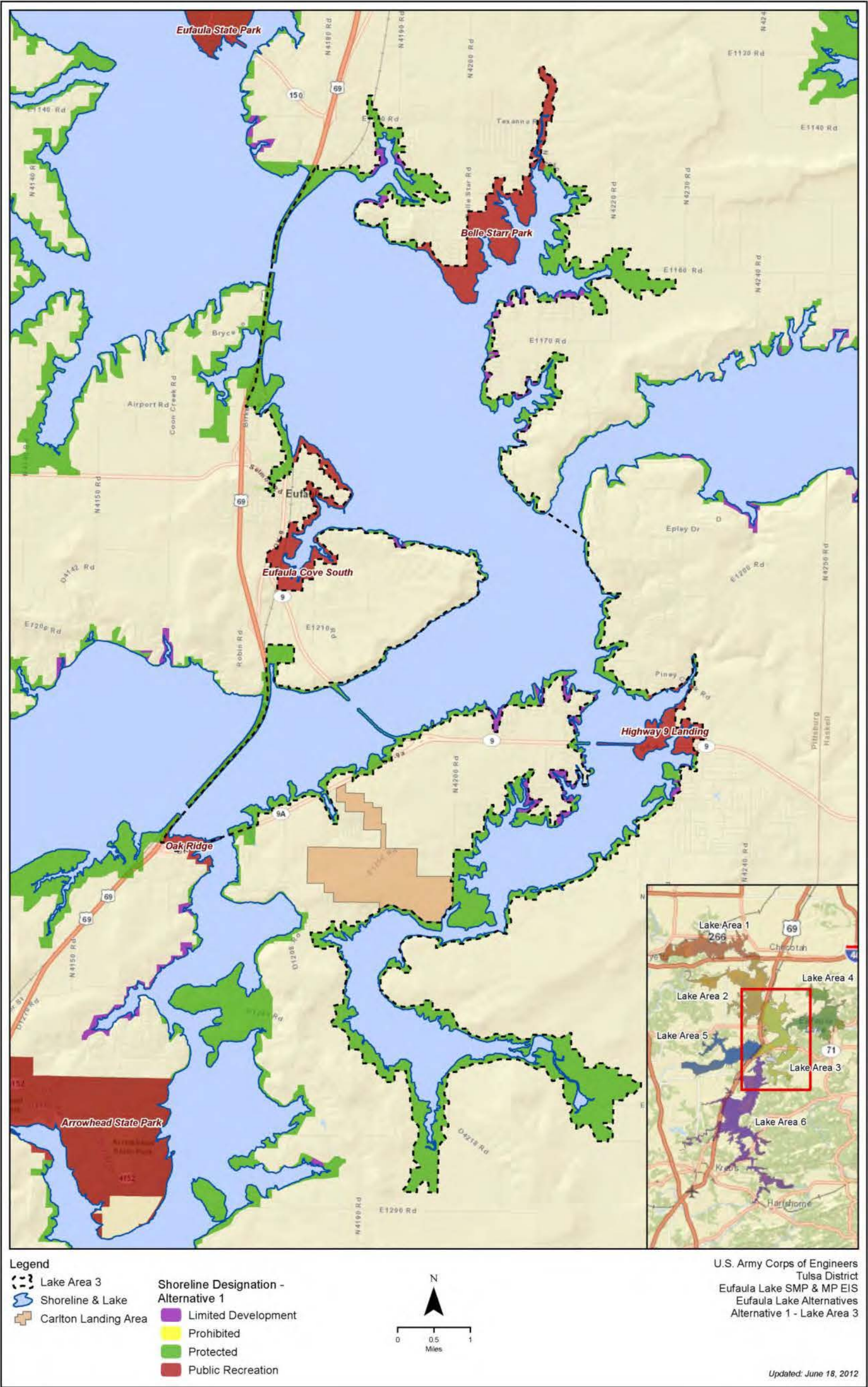


Figure 2-21. Alternative 1 Lake Area 3

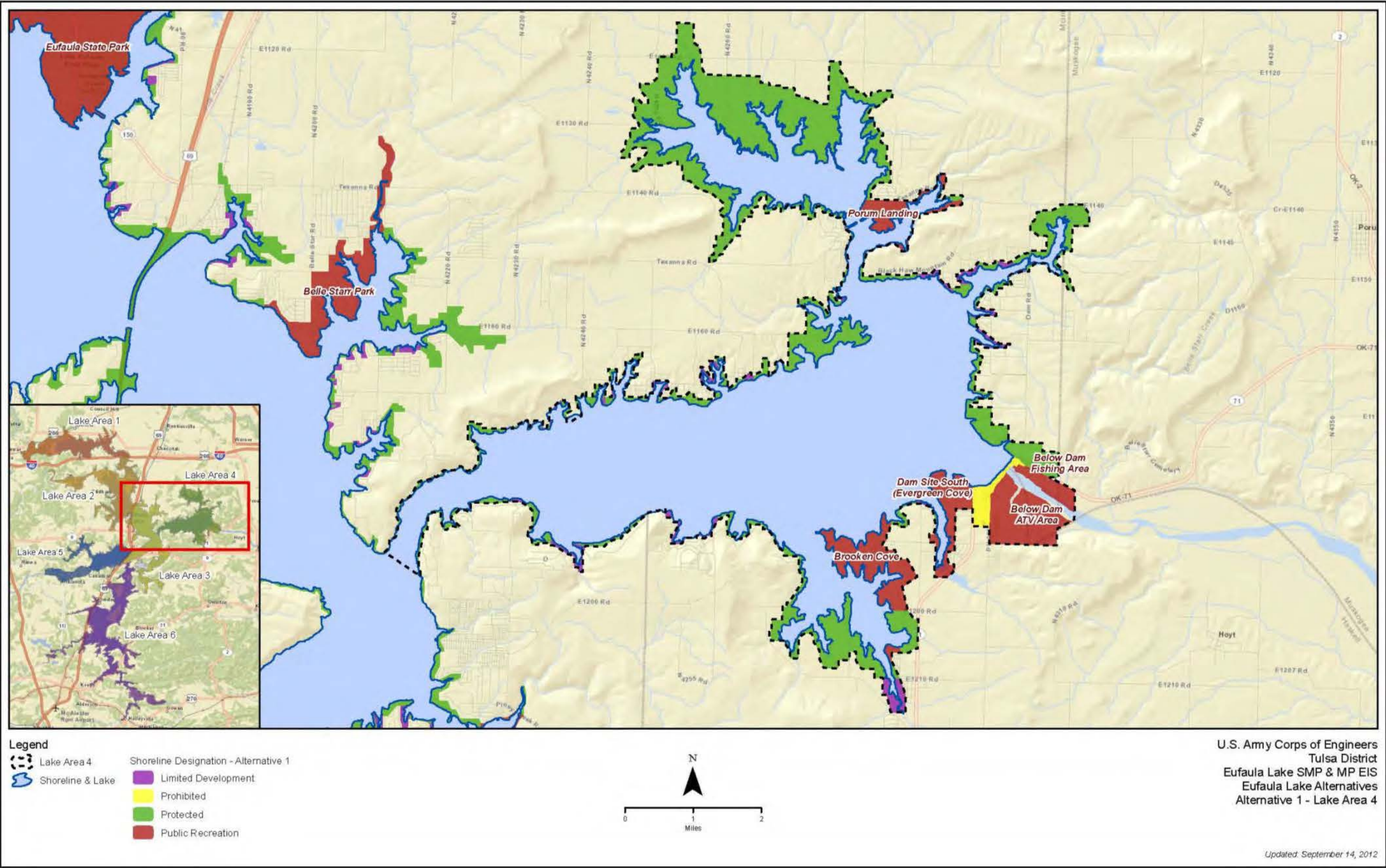


Figure 2-22. Alternative 1 Lake Area 4

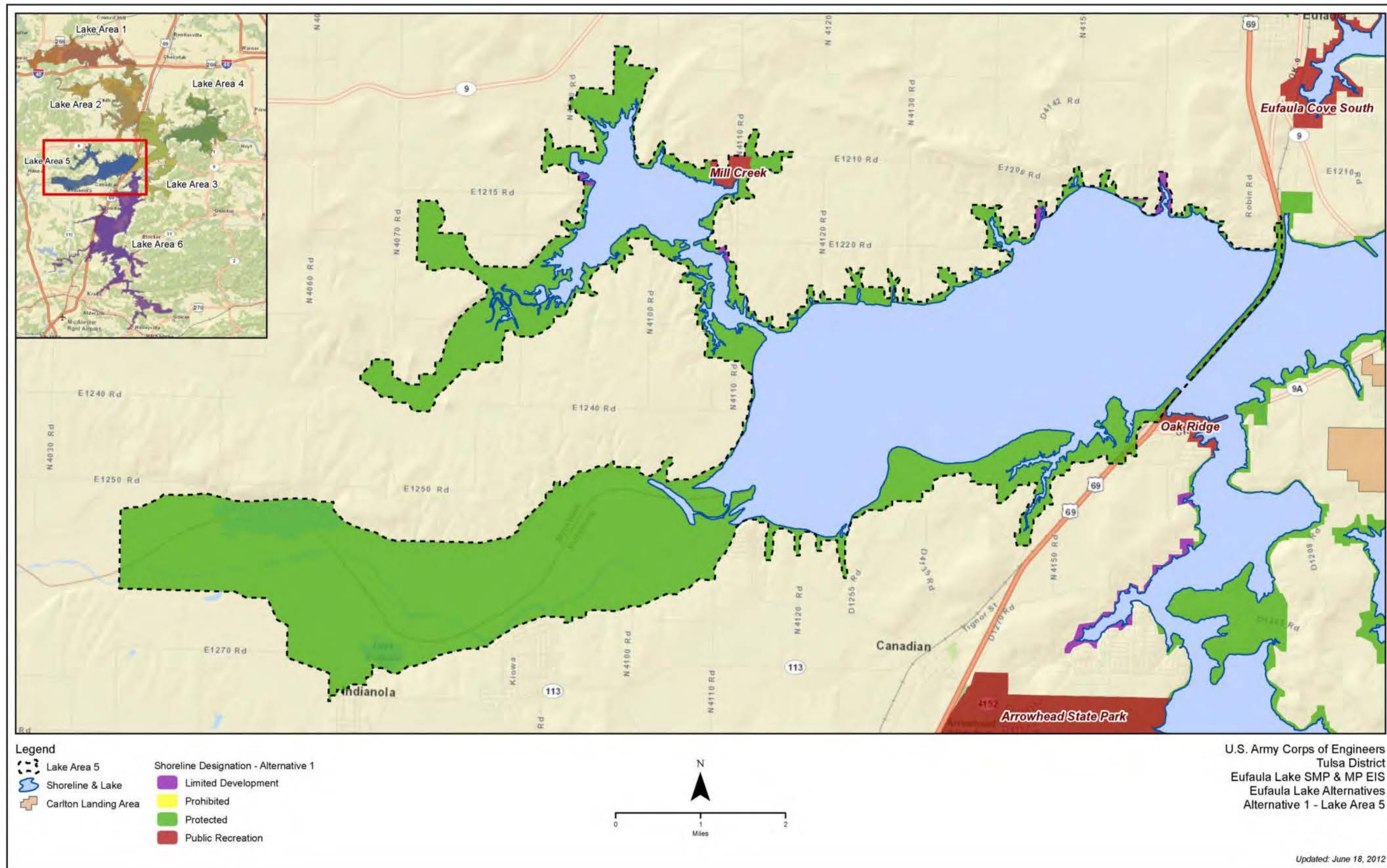


Figure 2-23. Alternative 1 Lake Area 5

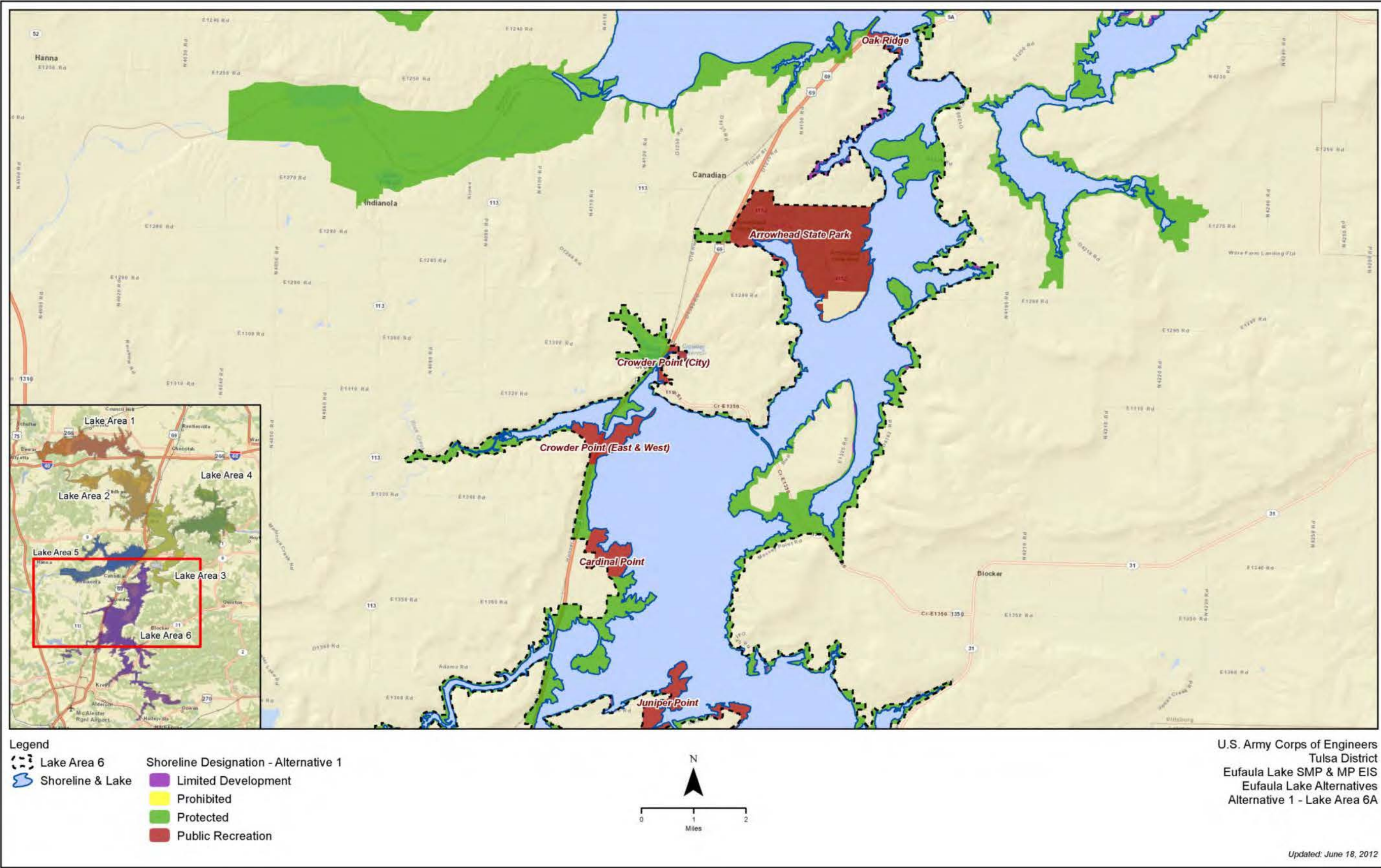


Figure 2-24. Alternative 1 Lake Area 6A

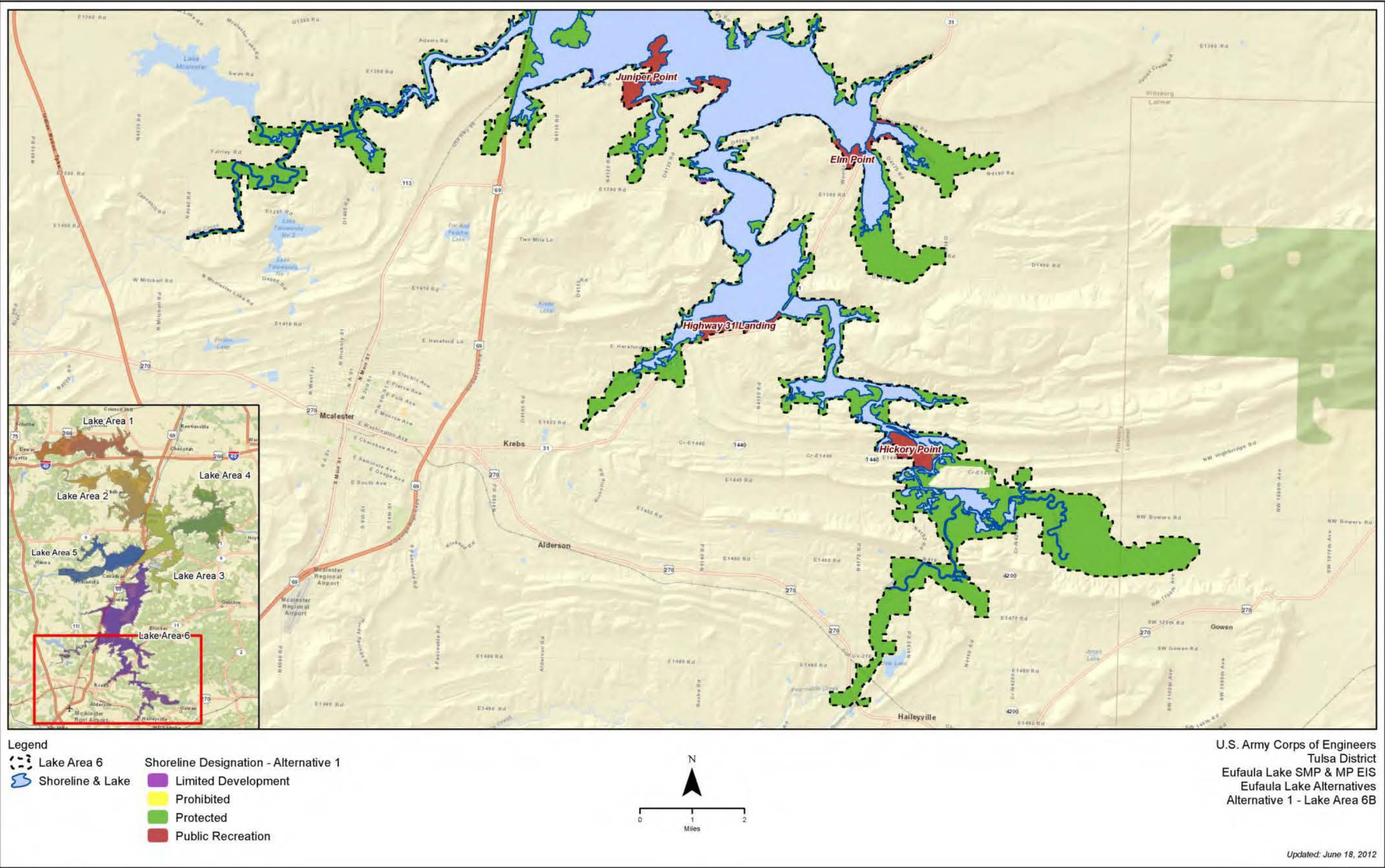


Figure 2-25. Alternative 1 Lake Area 6B

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2.4.4 Alternative 2

Alternative 2 would reduce the amount of Limited Development area compared to the No Action Alternative by converting Limited Development areas that are unsuitable for docks and which do not have existing developments adjacent to the government shoreline to Protected. “Dock suitability” is described in Section 2.4.4.1. Alternative 2 includes the following main components:

- Limited Development areas that do not have existing subdivisions adjacent to the government lands and which are unsuitable for dock development would be converted to Protected and the MP land classification “low density recreation” would be changed to a “multiple resource management” classification be consistent with the SMP allocation.
- Any existing permitted facilities in areas that would be changed to the Protected allocation would be grandfathered until the facilities fail to meet the criteria set forth in 36 CFR 327.30(h).
- The vegetation management policies would be changed to apply the extended vegetation management zone policy.
- The MP land use classification maps would be revised to be consistent with the SMP shoreline allocations.
- The request for Public Recreation shoreline allocation at Carlton Landing would not be approved.
- The lease request for a public marina and other public shoreline recreational facilities at Carlton Landing would not be granted.
- Limited Development designated areas on the south side of Longtown Arm across from the proposed Carlton Landing (Area L shown on **Figure 2-11**) would remain Limited Development since these areas meet the criteria for dock suitability.

2.4.4.1 Shoreline Allocations and Land Use Classifications

Under Alternative 2, areas unsuitable for the construction of docks and floating facilities and which do not have adjacent existing subdivisions would be changed to Protected allocations. **Figures 2-26 through 2-32** illustrate the shoreline allocations proposed under Alternative 2. Dock suitability was defined by the following criteria:

- **Depth of water:** To accommodate boat mooring, use of a boat water lift, and to avoid access difficulties when the lake is at low water levels, the water must be at least 6 feet deep or deeper when the lake is at its normal pool elevation (*i.e.*, elevation 585 feet above mean sea level).
- **Distance from shoreline:** Docks greater than 200 feet from the shoreline at normal pool elevation become impracticable to construct and maintain and may conflict with regulations that limit dock length to less than one-third of the width of the cove in which they are constructed.
- **Exposure to severe wave action:** Along south facing shoreline areas, wind fetch greater than 1 mile and along north facing shoreline areas, wind fetch greater than 1.5 miles can result in severe wave action. Wind fetch is defined as the distance across open water that wind travels and creates waves before reaching a shoreline. A long wind fetch results in big waves during storms that break docks

apart and subsequently leaves debris scattered along the shoreline. Docks constructed in these exposed locations typically do not last more than a year or two and are impracticable to maintain.

Based on these criteria, areas exposed to severe wave action and areas where the water depths do not reach more than 6 feet at normal pool elevation within 200 feet of the shoreline were considered to be unsuitable for docks.

Adjacent existing subdivisions were determined from county parcel records and aerial photo interpretation. Areas with existing residential structures and patterns of relatively small lots were considered to be developed.

Under Alternative 2, Limited Development shoreline not suitable for the construction of docks would be rezoned to Protected. As compared to the No Action Alternative, the amount of Limited Development shoreline would be reduced by 89 miles to result in a total of 182 miles of Limited Development shoreline under this alternative (**Table 2-7**). Protected areas would be increased by 87 miles as compared to the No Action Alternative total of 517 miles (**Table 2-7**). While the total acres classified as Low Density Recreation would not change, the area associated with Limited Development shorelines would decrease from 10,209 acres to 5,367 acres and the acreage associated with Protected shorelines would increase from 9,209 to 14,051 acres (**Table 2-8**). There would be two additional shoreline miles allocated to Public Recreation to properly account for Onapa Cove, and the undeveloped High Density Recreation areas would be reclassified in the revised MP as Future/Inactive Recreation. There would be no change in Prohibited allocations (**Tables 2-7 and 2-8**).

Existing permitted facilities in areas that would be converted from Limited Development to Protected would be grandfathered until the facilities fail to meet the criteria set forth in 36 CFR 327.30(h). Those criteria include the conditions that the facilities must be maintained in a safe and useable condition, the facility does not pose a threat to life or property, and the holder of the permit remains in substantial compliance with the permit.

Under Alternative 2, which would reduce the Limited Development allocated shoreline to 182 miles, there could be a potential maximum of 5,873 docks. While the actual number of docks would likely be considerably less due to the physical constraints of the shoreline, this maximum build out scenario illustrates that there is substantial potential for growth in the number of docks under Alternative 2 from the existing condition.

Using the projected growth rate in permit applications to project future growth in dock numbers, the maximum potential number of docks allowed under Alternative 2 would be reached in just over 50 years. The potential maximum number of docks and the potential time to reach that maximum under Alternative 2 would be less than under the No Action Alternative.

Another limitation on the total number of boat docks and/or the timing at which that number might be reached is the processing time needed to review and approve shoreline permits. Under the projected growth rate in permit applications, the Eufaula Lake Project Office would need to process about 125 new applications per year during the final decade. This is almost three times more than the number of new shoreline permits for docks that are currently processed annually. The number of staff that would be required to process the new applications in addition to dock renewal permits and required inspections would indicate that reaching a milestone of almost 6,000 docks in approximately 50 years is unlikely.

2.4.4.2 Vegetation Management Policies

Vegetation management policies under Alternative 2 would be the same as those described for Alternative 1 and would follow the extended buffer vegetation management policy summarized in **Table 2-3**. Where high quality habitat occurs that could be impacted by vegetation modification, mowing may be restricted to no more than the first 30- feet of government land immediately adjacent to the private property for fire break purposes only.

2.4.4.3 Proposed Carlton Landing Development (Alternative 2)

The development at Carlton Landing under Alternative 2 would be the same as that described under the No Action Alternative.

Similar to the No Action Alternative, the Limited Development designated areas on the south side of Longtown Arm (Area L on **Figure 2-11**) would remain Limited Development, as this area meets the criteria for “dock suitability.” The continued presence of this Limited Development zone (**Figure 2-28**) would allow for some additional private docks and floating facilities to be developed in association with the initial residential development at Carlton Landing (described under the No Action Alternative). However, the limited access would make them less attractive to homeowners on the north side of the lake and the number of boats that could be accommodated would be considerably less than with the proposed marina.

Under Alternative 2, the requested lease of government land would not be granted and the proposed marina and other public shoreline recreational facilities would not be constructed. In addition, the Protected allocation on the Carlton Landing side of Longtown Arm would preclude the use of the shoreline for the proposed extensive developed public trail system, camping, swimming beaches, and other developed recreational facilities. The USACE-owned lands would continue to provide habitat for wildlife and fishing access. Under Alternative 2, the MP land classification would be changed from High Density Recreation to Future/Inactive Recreation.

Under Alternative 2, the potential scope of future development at Carlton Landing would be the same as that described for the No Action Alternative.

2.4.4.4 Individual Zoning Requests under Alternative 2

Similar to the No Action Alternative, none of the individual zoning requests to change the existing shoreline allocation to another allocation would be approved under Alternative 2. In addition, none of the requests to maintain Limited Development would be affected by Alternative 2; in each case, Alternative 2 would maintain Limited Development allocations adjacent to the requestor’s properties. This is primarily because the requests to maintain Limited Development allocations were received from existing subdivisions and so these areas do not meet the criteria for conversion to Protected under Alternative 2. Each request is described in detail in Section 2.3.4.

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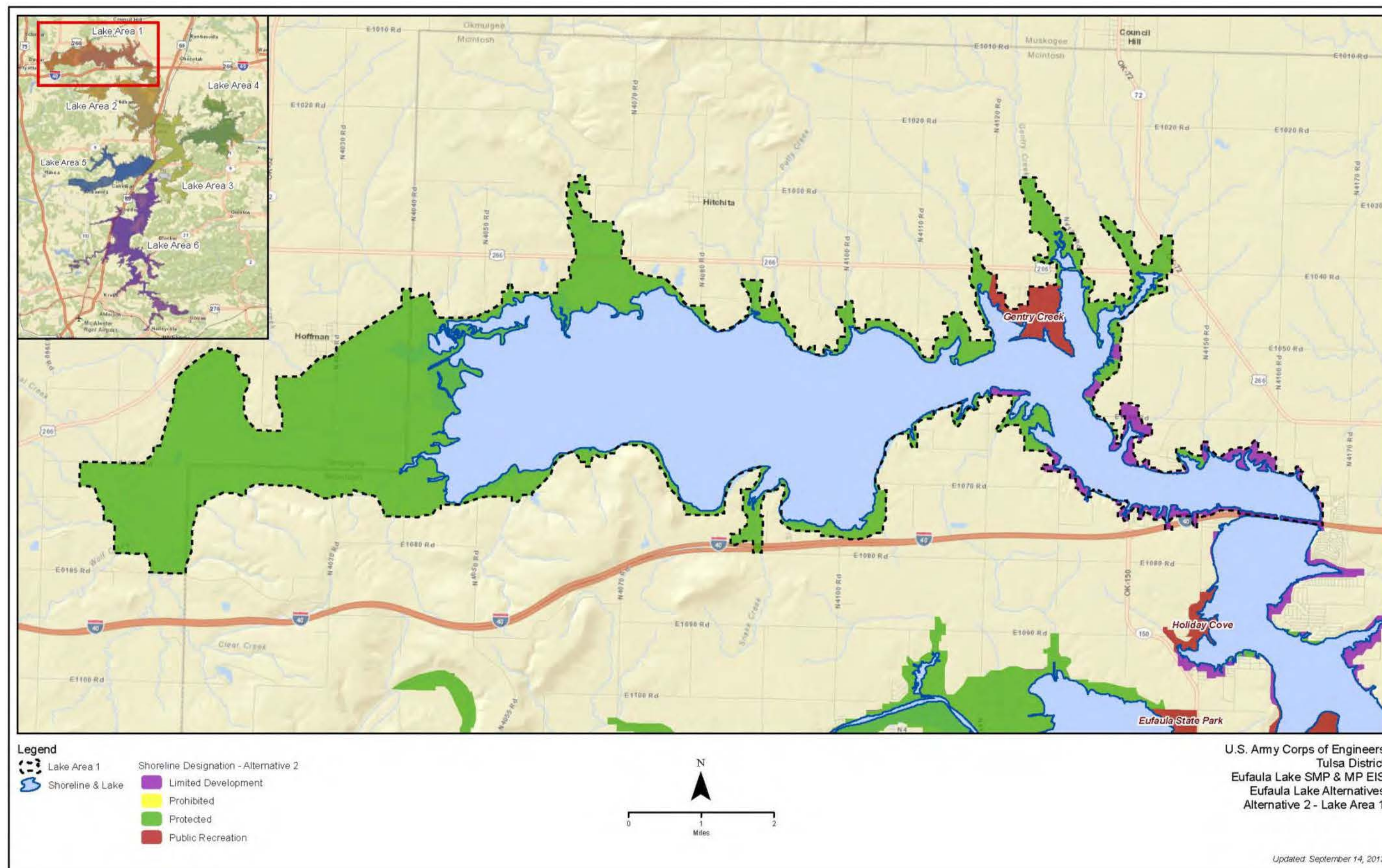


Figure 2-26. Alternative 2 Lake Area 1

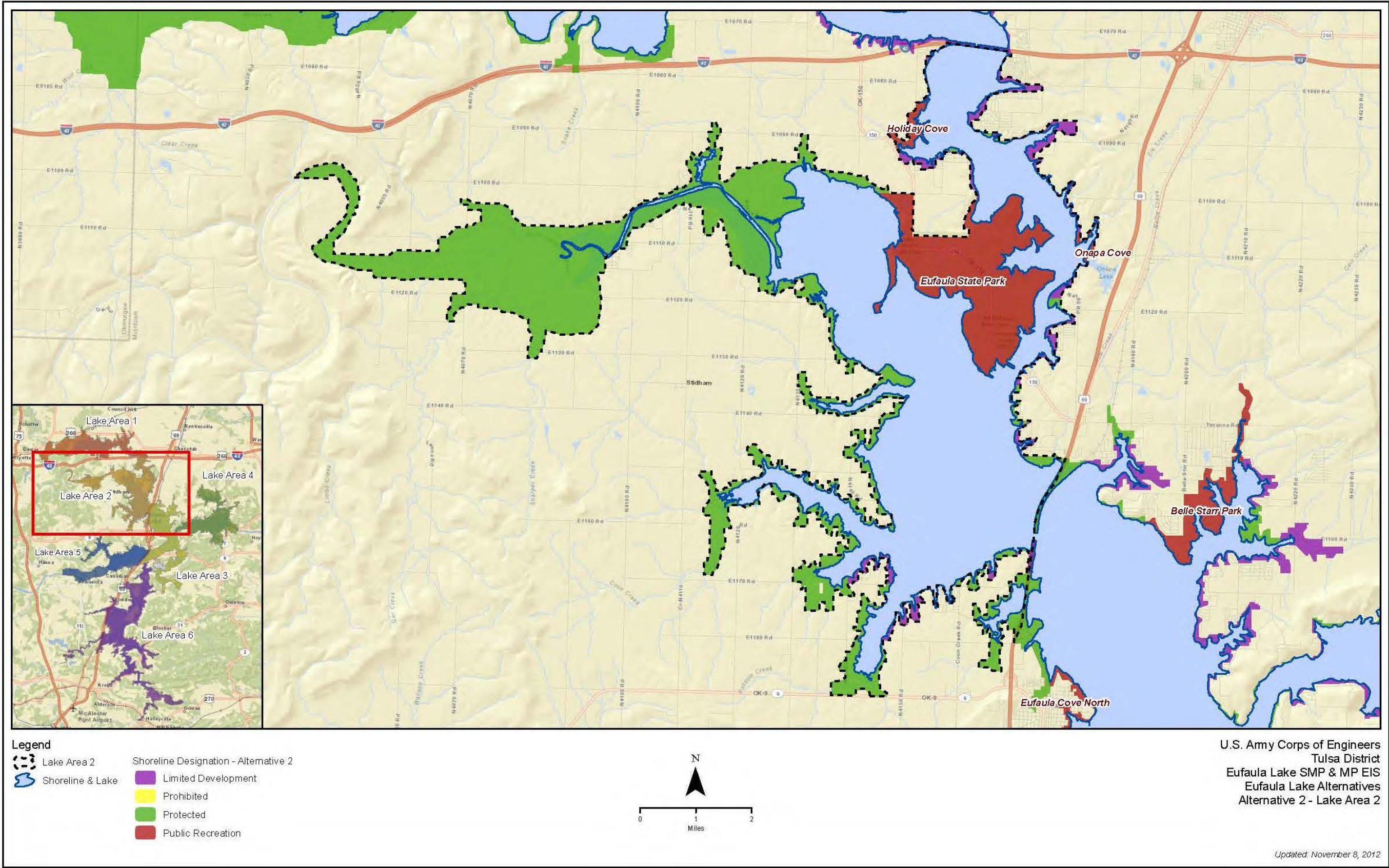


Figure 2-27. Alternative 2 Lake Area 2

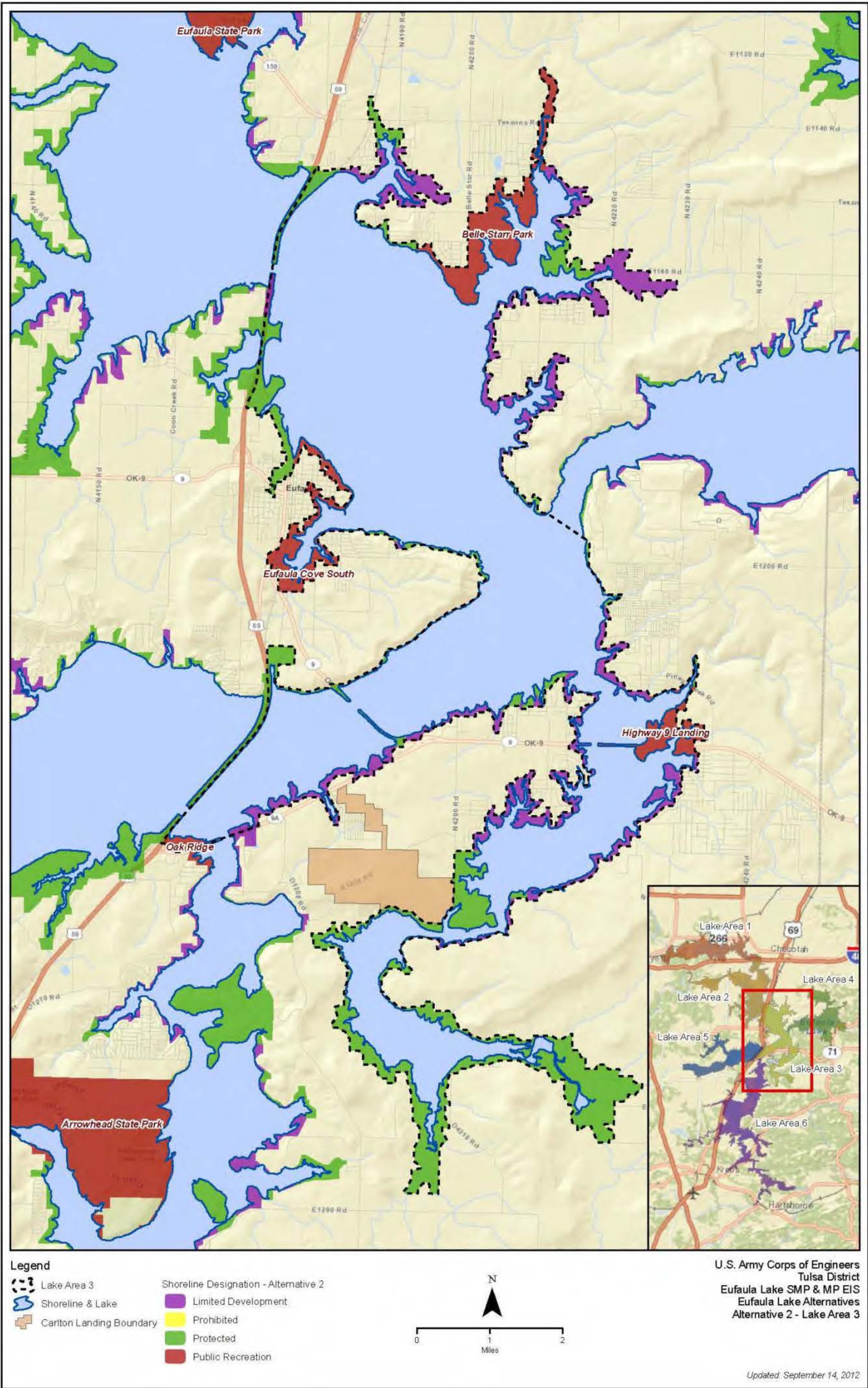


Figure 2-28. Alternative 2 Lake Area 3

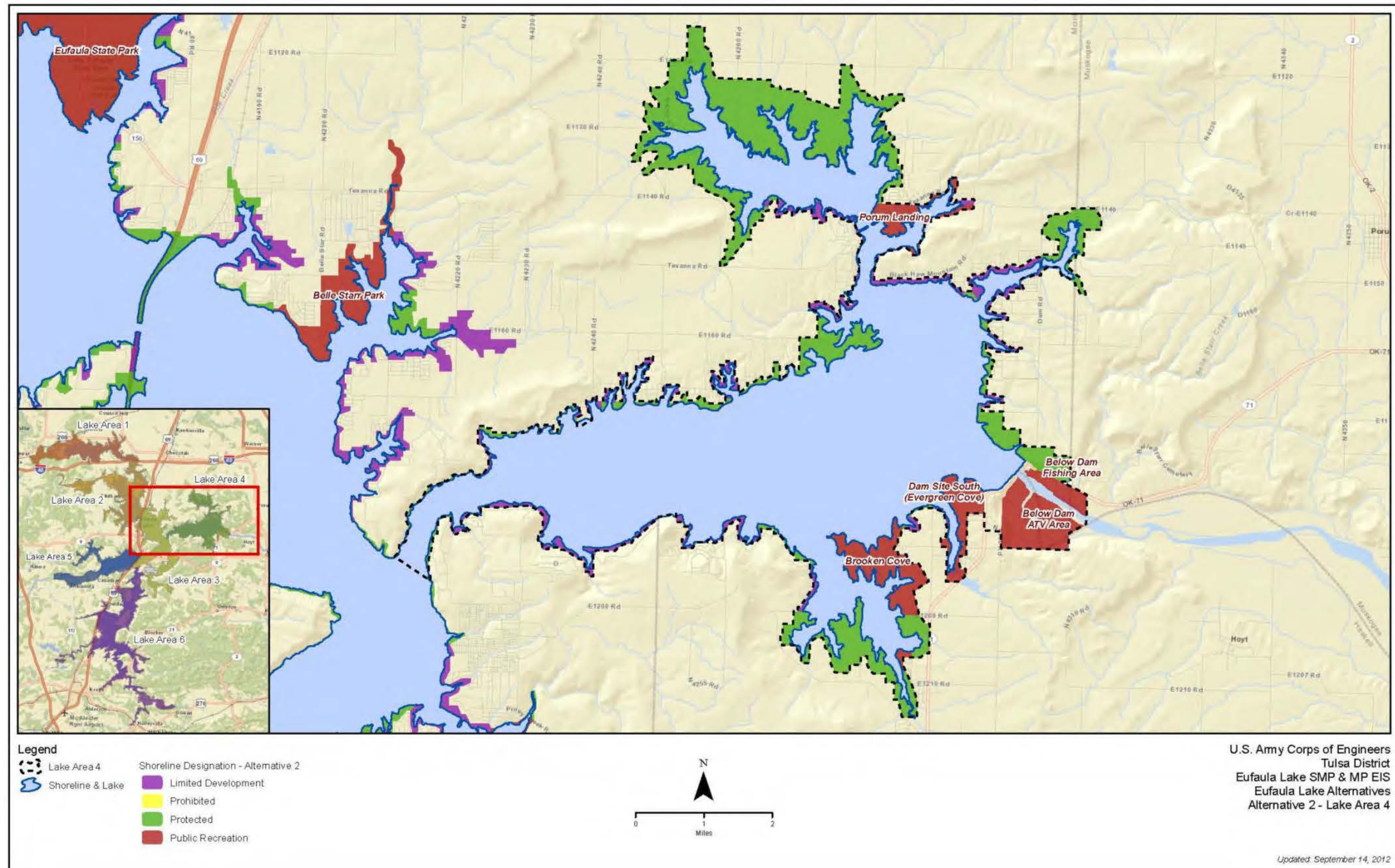


Figure 2-29. Alternative 2 Lake Area 4

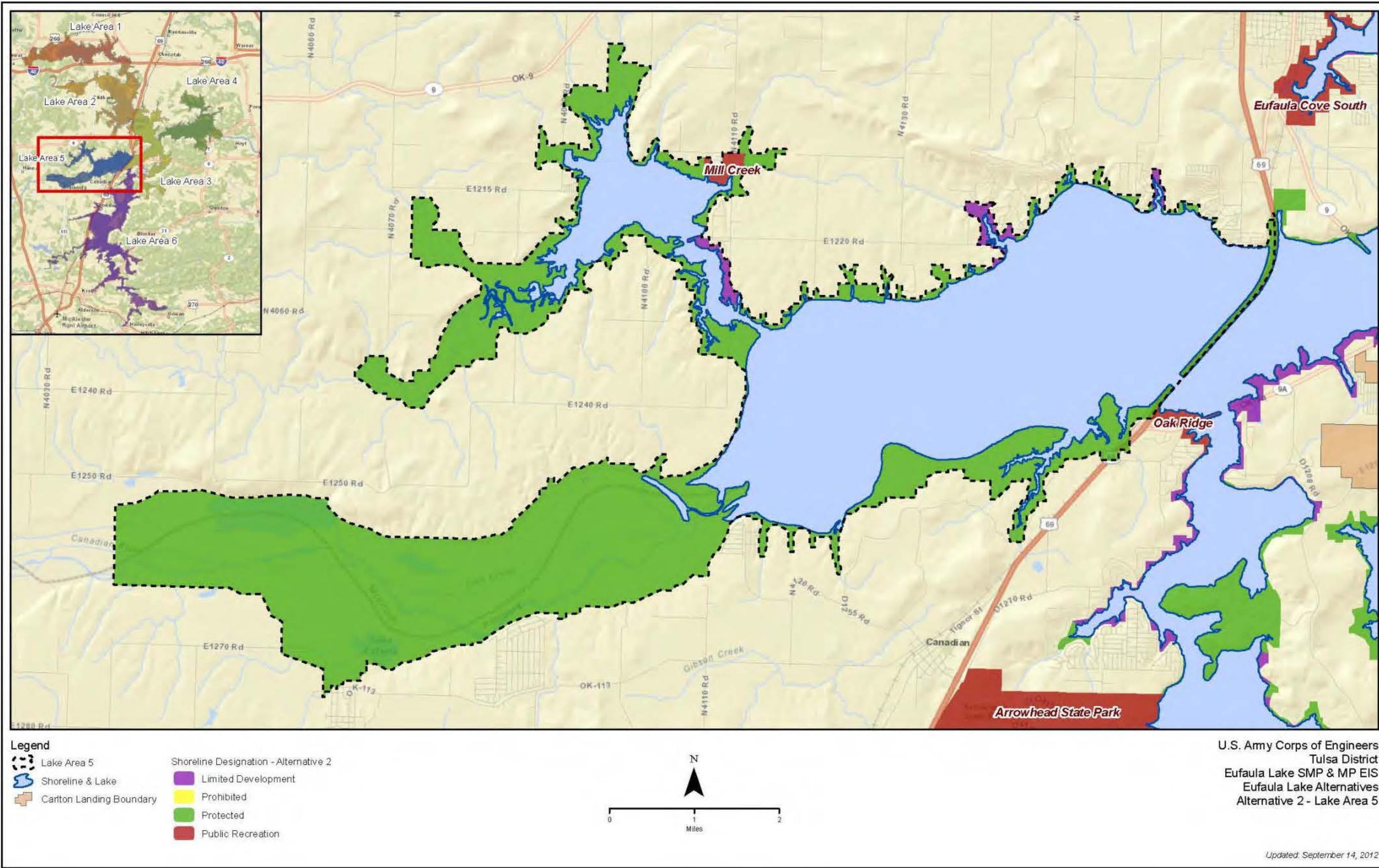


Figure 2-30. Alternative 2 Lake Area 5

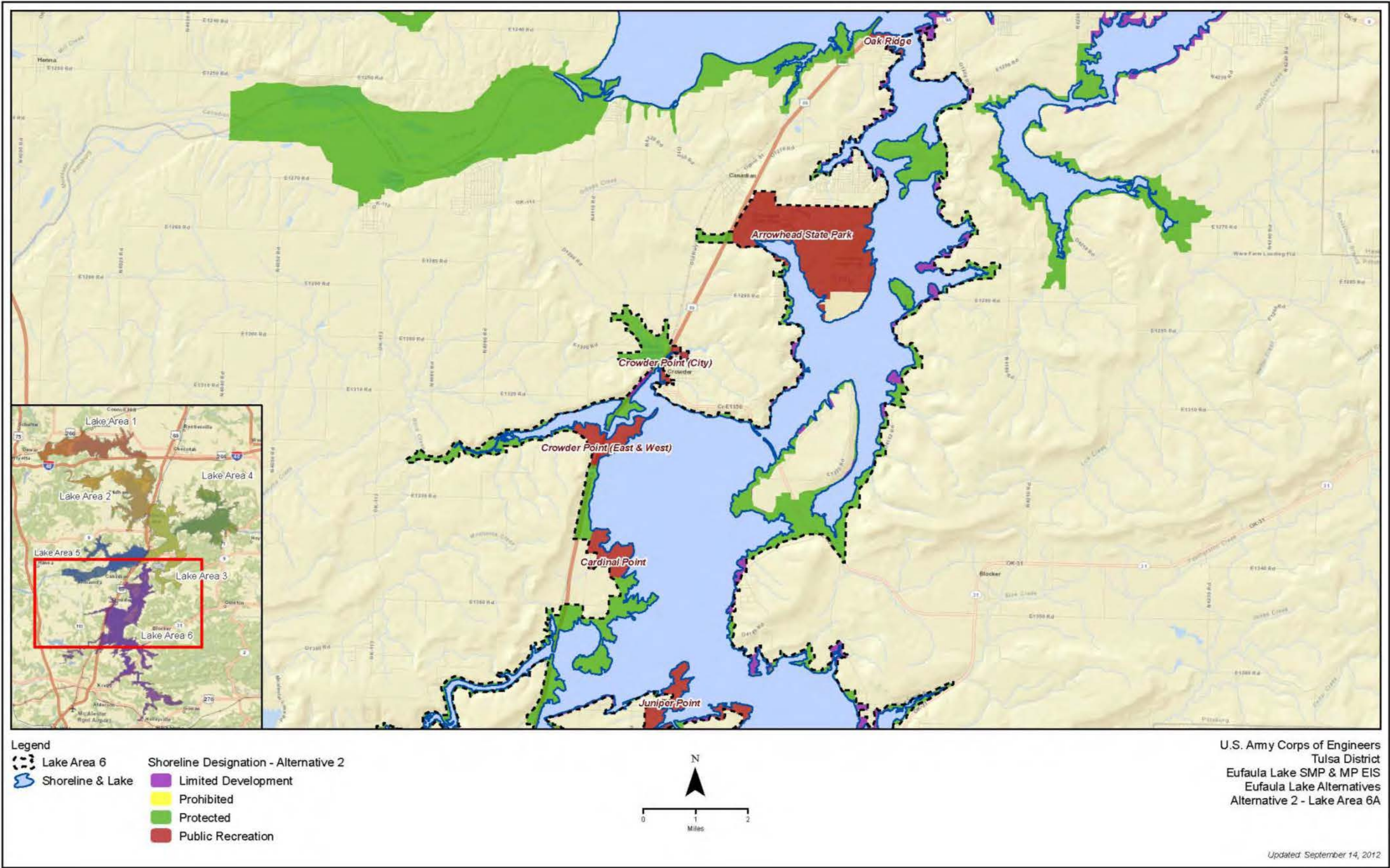


Figure 2-31. Alternative 2 Lake Area 6A

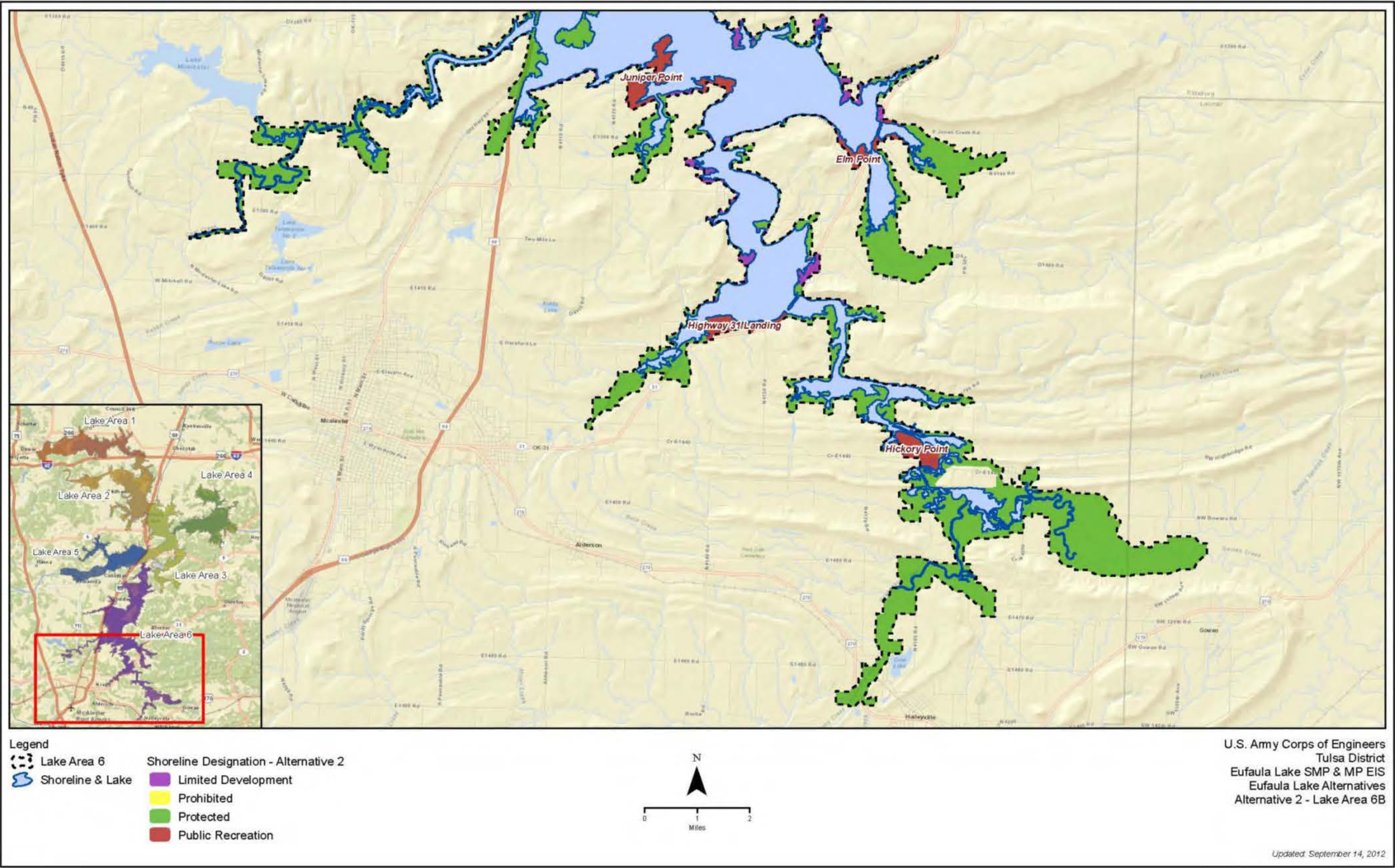


Figure 2-32. Alternative 2 Lake Area 6B

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2.4.5 Alternative 3

Alternative 3 would increase the amount of Limited Development area compared to the No Action Alternative by converting Protected areas that are suitable for docks and which do not have an existing license agreement for use of the government shoreline to Limited Development. “Dock suitability” is described in Section 2.4.4.1. Alternative 3 includes the following main components:

- Unencumbered Protected shoreline areas (*i.e.*, areas with no existing license agreement for use of the government shoreline to other agencies or organizations) that are also suitable for docks would be converted to Limited Development and the corresponding areas in the MP would be changed to “low density recreation” classified lands.
- MP land use classifications maps would be revised to be consistent with the SMP shoreline allocations.
- The vegetation management policies would be changed to apply the baseline buffer vegetation management policy.
- The Carlton Landing shoreline area allocations would be changed from Protected to Limited Development.
- The lease request for a public marina and other public shoreline recreational facilities at Carlton Landing would not be granted.

2.4.5.1 Shoreline Allocations and Land Use Classifications

Unencumbered Protected shoreline areas are government lands that have not been leased to other agencies or organizations for specific purposes. For example, many Protected shoreline areas are licensed to the Oklahoma Department of Wildlife Conservation (ODWC) for wildlife management and hunting activities. Under Alternative 3, these areas would not be changed to Limited Development regardless of their suitability for dock construction and maintenance. Suitability criteria for dock construction are the same as those described for Alternative 2 (Section 2.4.4.1). **Figures 2-33** through **2-39** illustrate the shoreline allocations proposed under Alternative 3.

Under Alternative 3, Limited Development shoreline miles would increase by 96 miles for a total of 367 miles (**Tables 2-7** and **2-8**). This represents a 35 percent increase in miles of Limited Development shoreline. Protected areas would be reduced by the same amount to a total of 332 miles (**Tables 2-7** and **2-8**). This represents a 23 percent decrease in miles of Protected shoreline. While the total acres classified as Low Density Recreation would not change, the acreage associated with Limited Development shorelines would increase from 10,209 acres to 16,777 acres and the acreage associated with Protected shorelines would decrease from 9,209 to 2,899 acres (**Table 2-8**). There would be no change to the number of shoreline miles in Public Recreation, but the undeveloped High Density Recreation areas would be reclassified in the revised MP as Future/Inactive Recreation, with the exception of Roundtree Landing (258 acres), which would be converted to Low Density Recreation to be consistent with the SMP change to Limited Development. There would be no change in Prohibited allocations (**Tables 2-7** and **2-8**).

Under Alternative 3, which would increase the Limited Development allocated shoreline to 367 miles, there could be a potential maximum of 11,844 docks. While the actual number of docks would likely be considerably less due to the physical constraints of the shoreline, this maximum build out scenario

illustrates that there is substantial potential for growth in the number of docks under Alternative 3 compared to the existing condition.

Using the projected growth rate in permit applications to project future growth in dock numbers, the maximum potential number of docks allowed under Alternative 3 would be reached in about 85 years. The potential maximum number of docks under Alternative 3 is about 35 percent greater than the full build out of the No Action Alternative.

Another limitation on the total number of boat docks and/or the timing at which that number might be reached is the processing time needed to review and approve shoreline permits. Under the projected growth rate in permit applications, the Eufaula Lake Project Office would need to process about 185 new applications per year during the final decade. This is over four times more than the number of new dock permits that are currently processed annually. The number of new staff that would be required to process the new applications in addition to dock renewal permits and required inspections (approximately 20 percent of existing dock permits are renewed each year) would indicate that reaching a milestone of almost 12,000 docks in approximately 85 years is unlikely.

2.4.5.2 Vegetation Management Policies

Under this alternative, the baseline vegetation management policy would be implemented. The baseline buffer vegetation management policy includes the basic buffers proposed to protect shoreline habitats. Based on the criteria in this policy (described in Section 2.3.2), shoreline areas would be categorized into specific buffer distance groups. As shown in **Table 2-3**, the baseline buffer widths would range from 20 to 70 feet inland from the natural vegetation line above the normal conservation pool elevation. In order to limit effects on water quality, vegetation, and wildlife habitat, vegetation management activities would be limited to government land outside of these buffer zones. Where high quality habitat occurs that could be impacted by vegetation modification, mowing may be restricted to no more than the first 30- feet of government land immediately adjacent to the private property for fire break purposes only.

2.4.5.3 Proposed Carlton Landing Development (Alternative 3)

Under Alternative 3, the Protected areas along the Carlton Landing shoreline would be changed to Limited Development (**Figure 2-35**). The request to change these shoreline areas to Public Recreation would not be granted under this alternative. However, because none of the area is currently leased to another agency or organization and it meets the criteria for dock suitability, it would be changed to Limited Development. The MP classification on 258 acres would change to Low Density Recreation to be consistent with the MP. Under Alternative 3, the requested lease over government land would not be granted and the proposed marina and other public shoreline recreational facilities would not be constructed as the zoning would not be appropriate for those uses

Under Alternative 3, the increase in Limited Development allocations on the north side of Longtown Arm would allow for some additional dock construction and boating access compared to the No Action Alternative. However, the number of boats that could be accommodated would be limited. Boating access to lake-based recreation would be largely limited to the private home sites immediately adjacent to the government lands along the shoreline and in the town center area. Additionally, because the public marina would not be allowed, the proposed shared boat club would not be available to provide boat moorage for interior lot owners. Limited Development shoreline allocation would not allow for the development of public camping, hiking, horseback riding, or bicycling facilities on the government shoreline. The USACE-

owned lands would continue to provide habitat for wildlife and fishing access, although under Limited Development shoreline allocation, some vegetation modification could be permitted.

Although the Limited Development allocation would allow for a few more docks, overall, the scale and extent of the Carlton Landing development under Alternative 3 would be similar to that described under the No Action Alternative. Development would likely be limited to the current phase of construction on up to 170 lots. Residential construction would likely consist of the mix of units described for the No Action Alternative. It is expected that within the first two to five years the development would include a few more homes than under the No Action Alternative. However, the development would still be predominantly residential and there would likely not be sufficient density to support the associated commercial and community amenities proposed under full build-out conditions. This would limit the ability of the development to provide the full range of proposed community amenities such as private security and a concentration of businesses that would allow many residents to live within walking distance of services.

2.4.5.4 Individual Zoning Requests under Alternative 3

Individual zoning requests to change Protected shoreline areas to Limited Development allocations may be approved under Alternative 3 if the shoreline area is not encumbered with an existing license agreement with another agency or organization and the shoreline is suitable for docks. Zoning Request #8, Falcon Tree would be approved under Alternative 3. However, the area around Zoning Request #2 appears to be unsuitable for docks and would likely not be approved under Alternative 3. Each request is described in detail in Section 2.3.4.

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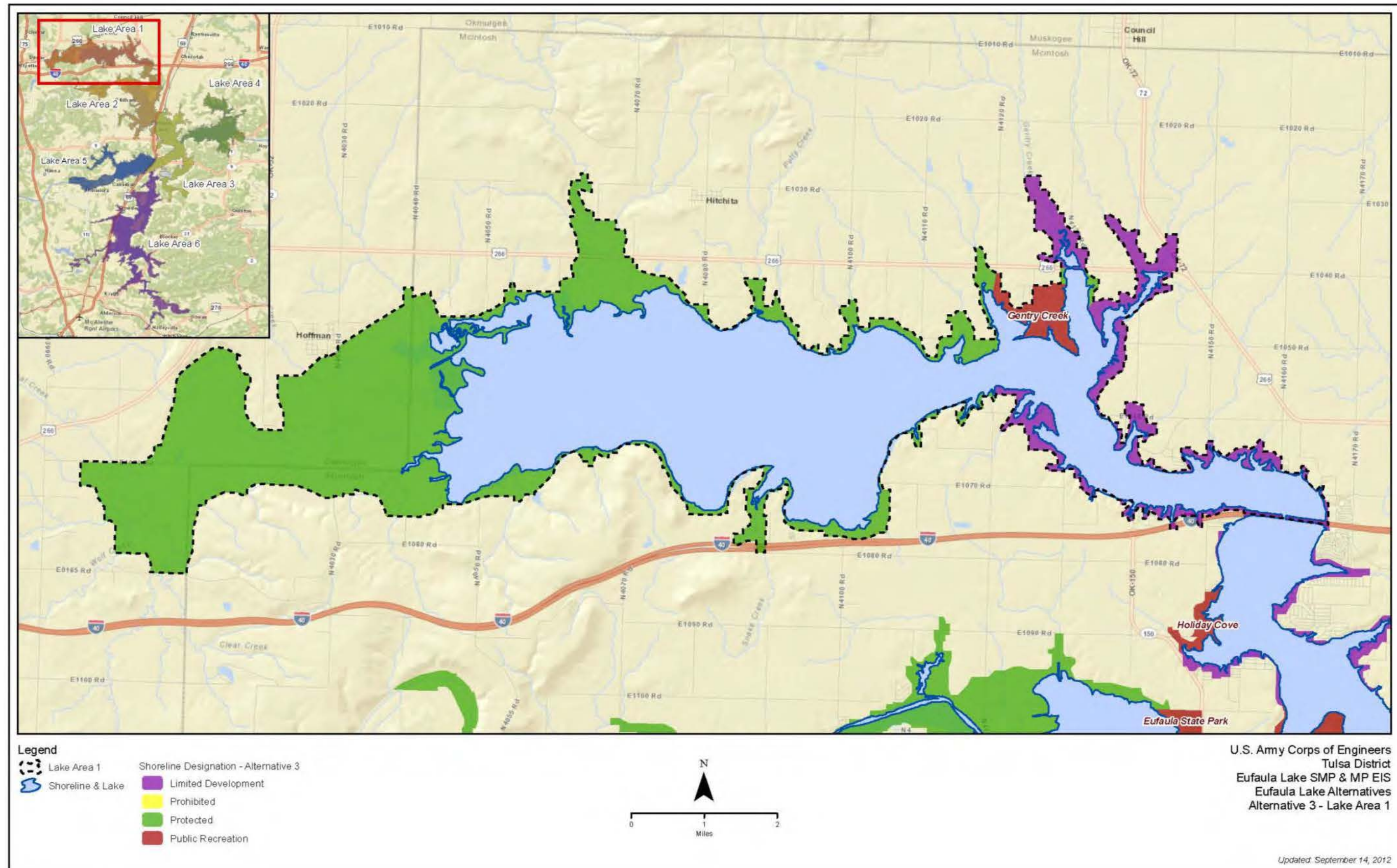


Figure 2-33. Alternative 3 Lake Area 1

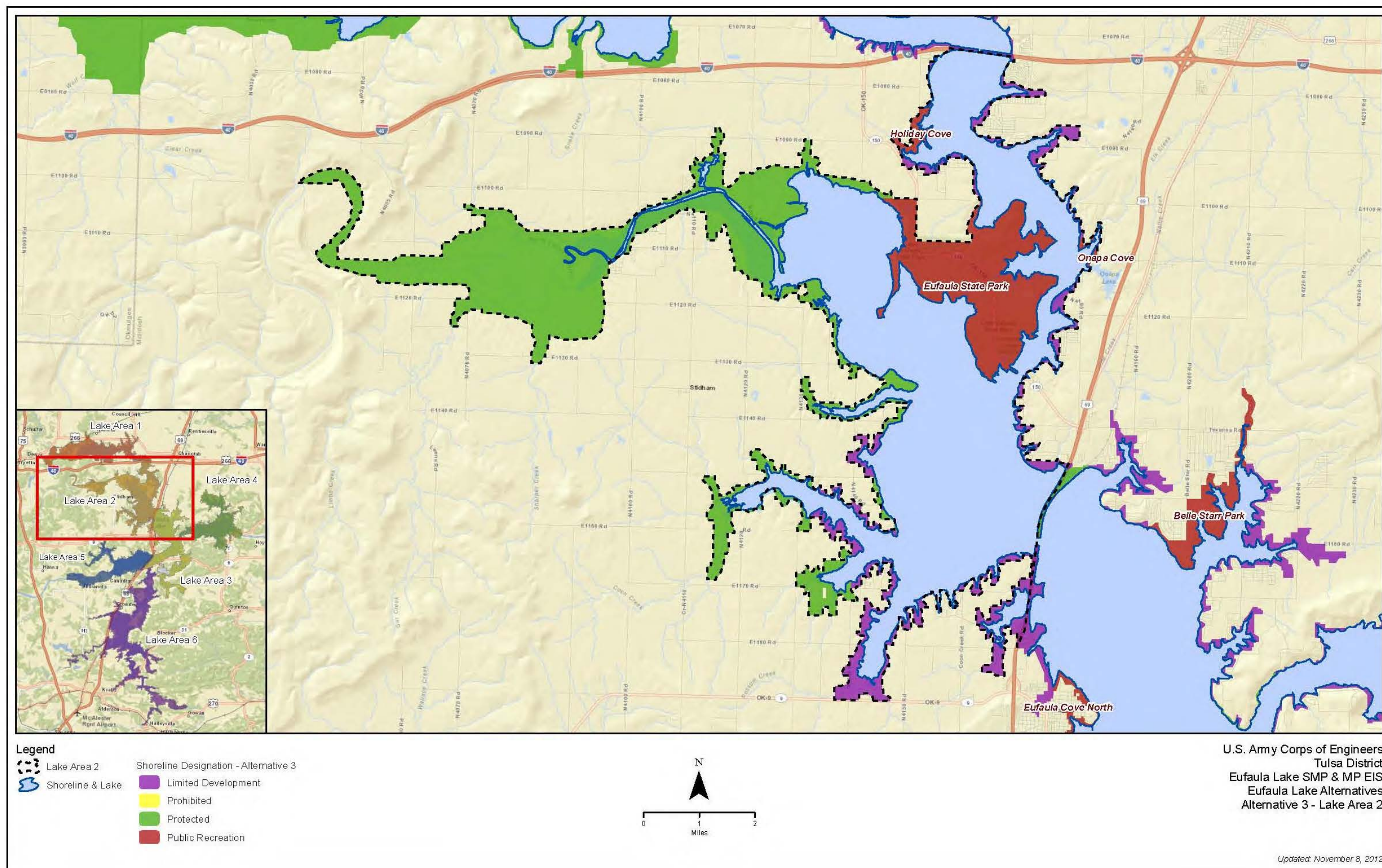


Figure 2-34. Alternative 3 Lake Area 2

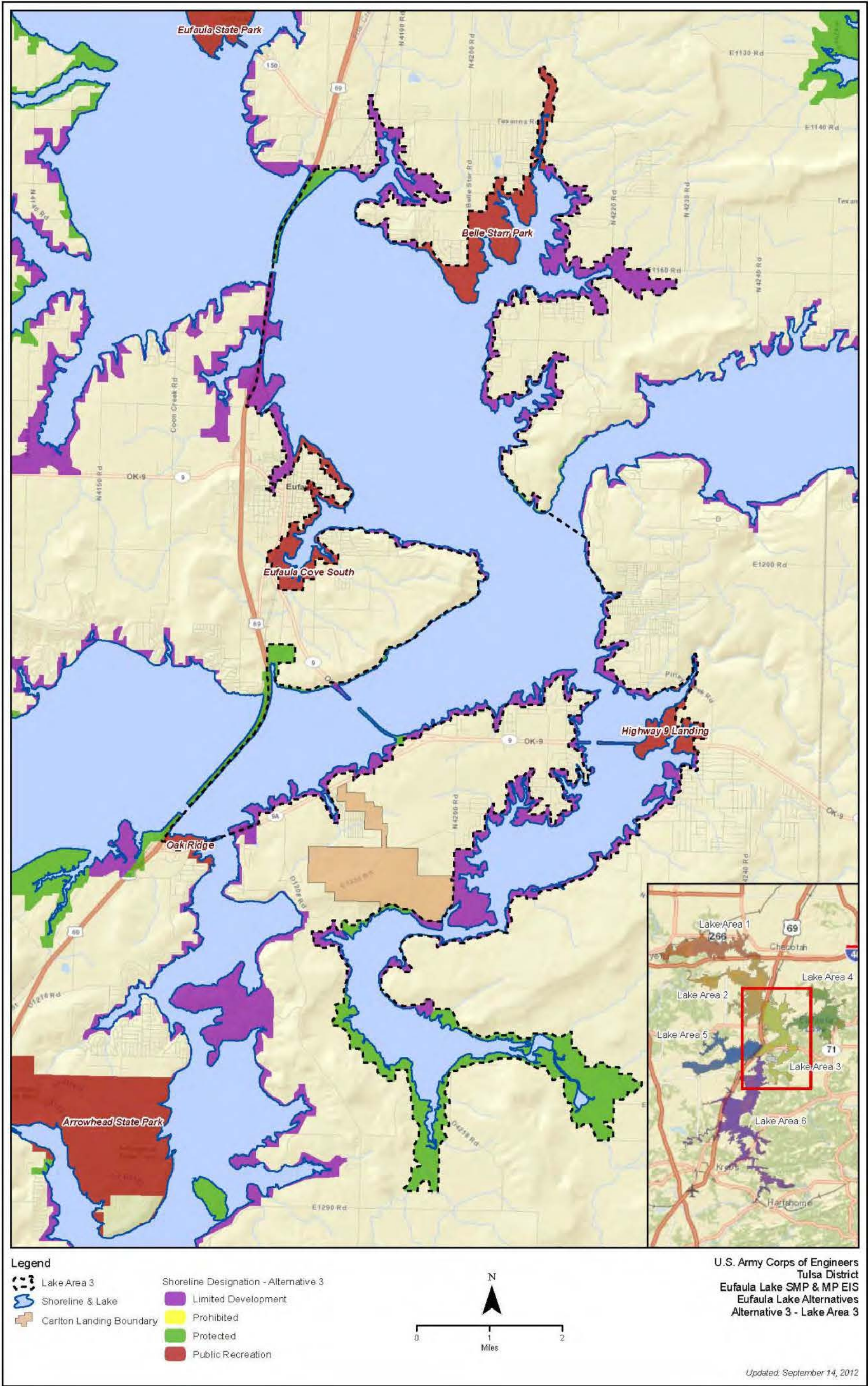


Figure 2-35. Alternative 3 Lake Area 3

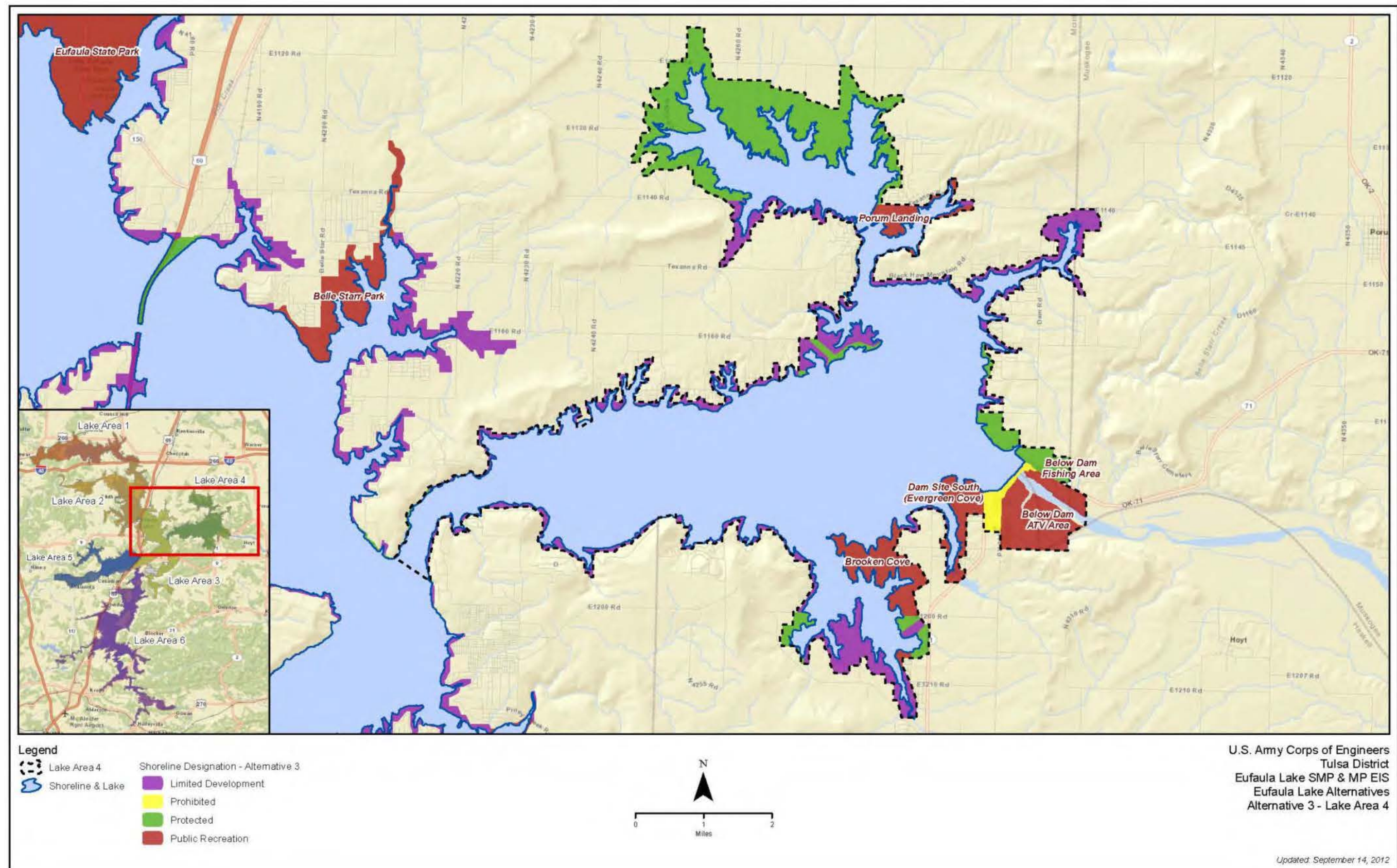


Figure 2-36. Alternative 3 Lake Area 4

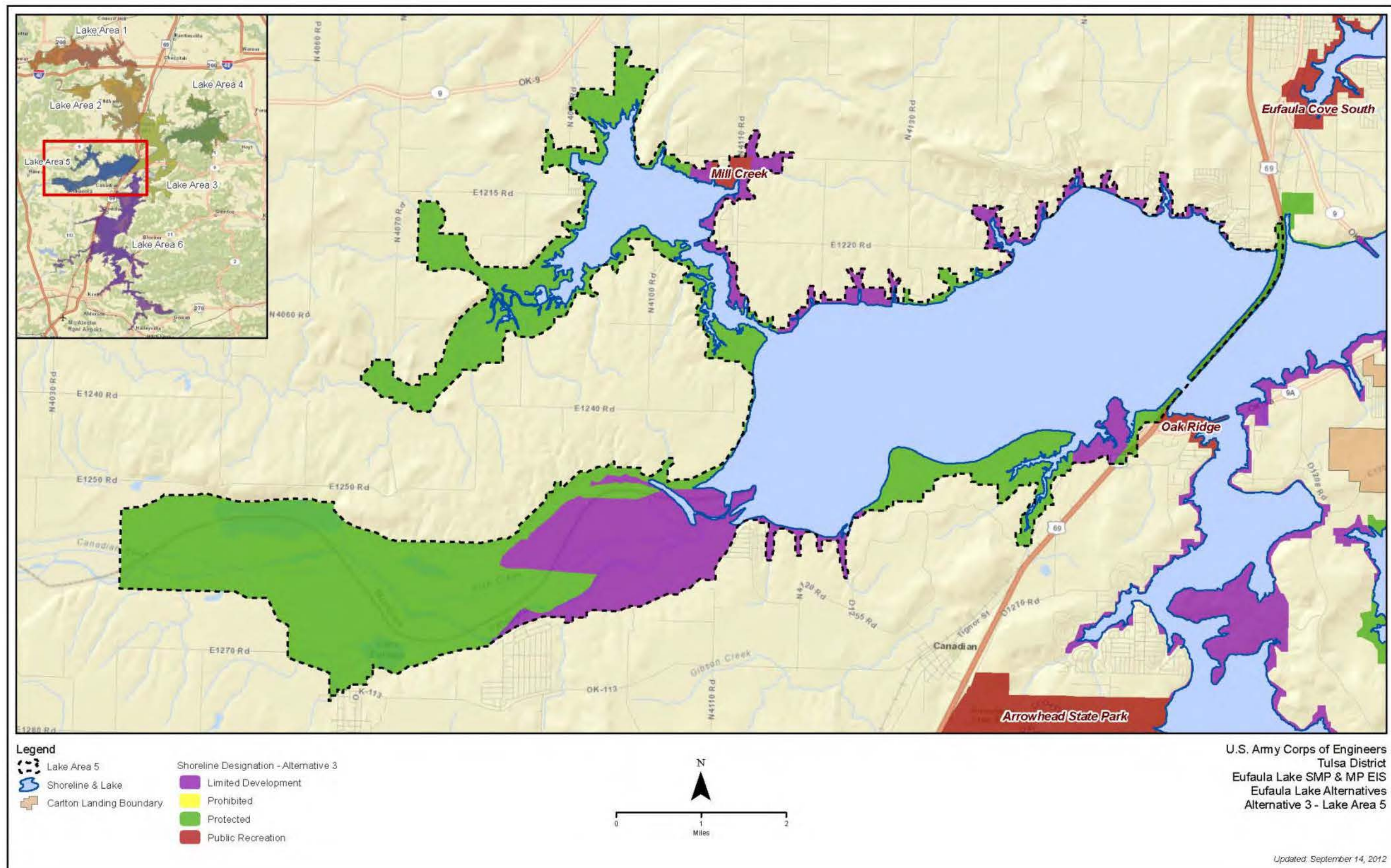


Figure 2-37. Alternative 3 Lake Area 5

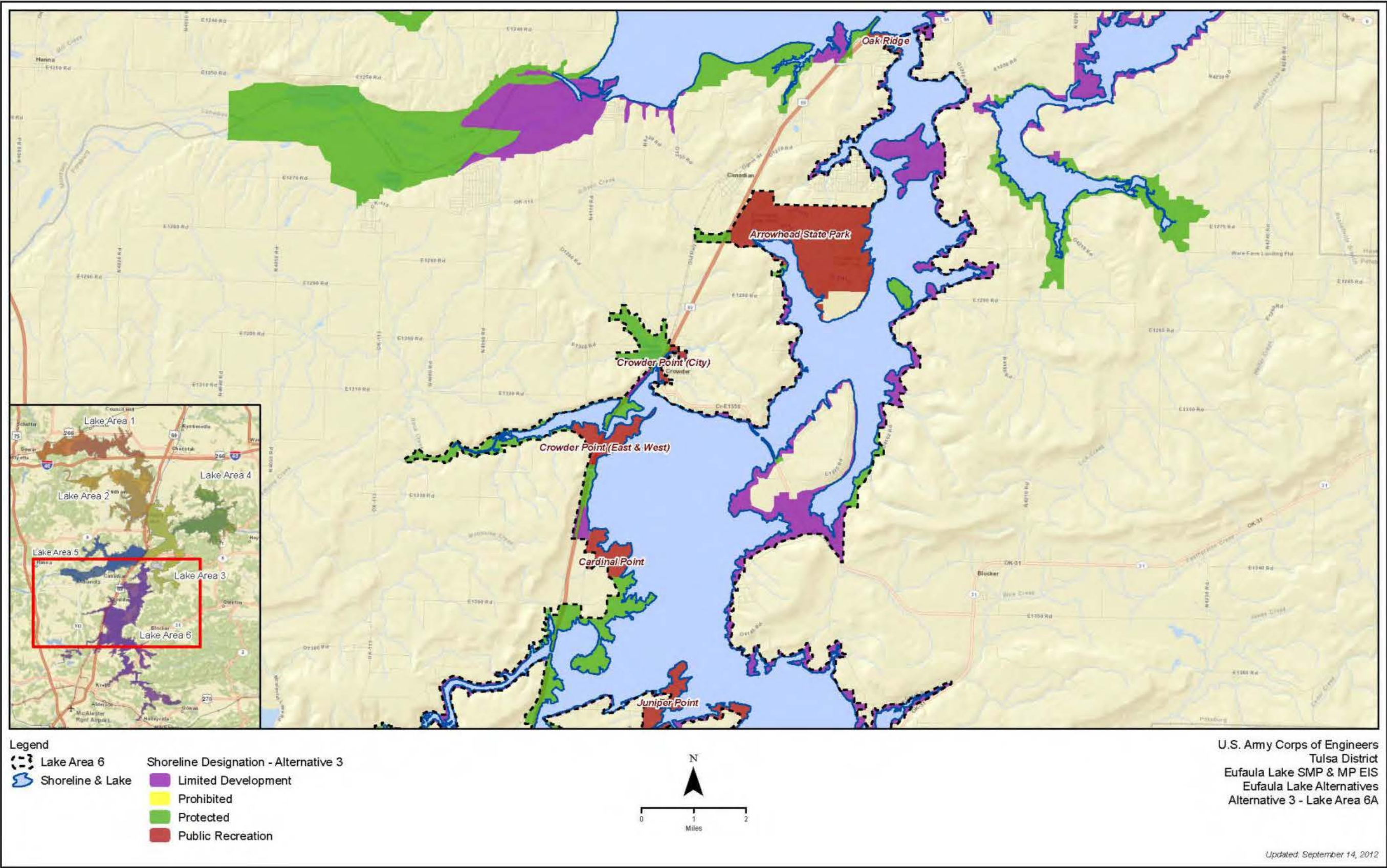


Figure 2-38. Alternative 3 Lake Area 6A

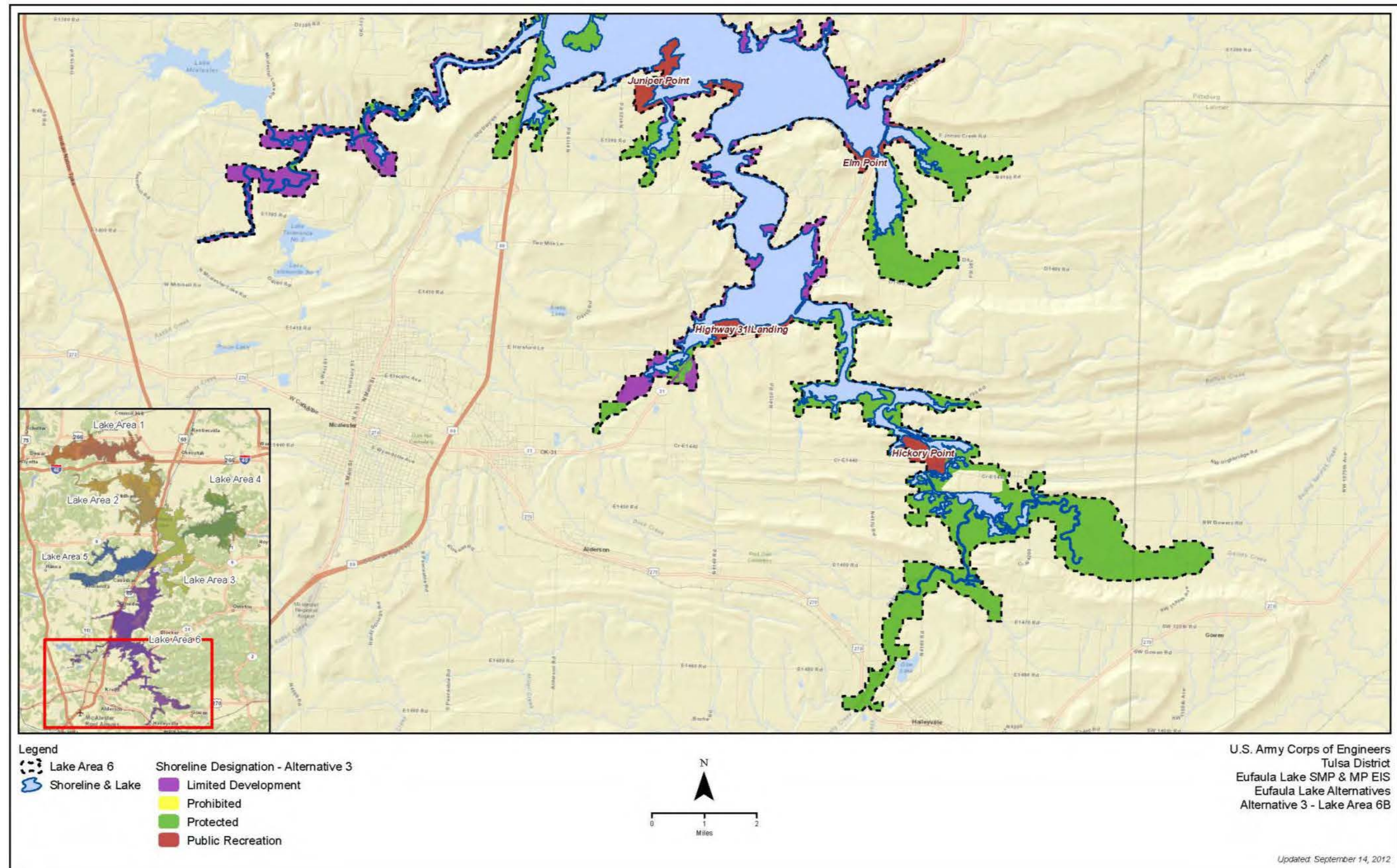


Figure 2-39. Alternative 3 Lake Area 6B

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2.4.6 Alternative 4

Alternative 4 would increase the amount of Limited Development area compared to the No Action Alternative by converting all Protected areas that do not have an existing license agreement for use of the government shoreline to Limited Development. This alternative represents the end of the range of alternatives that emphasizes private shoreline uses and recreational development opportunities over natural resource conservation. Alternative 4 includes the following main components:

- With the exception of the one specific request to change the existing Protected allocation to Public Recreation, all unencumbered Protected shoreline areas (*i.e.*, areas that are not leased to other agencies or organizations) would be converted to Limited Development regardless of suitability for docks.
- In the MP, only the “wildlife management” classification would remain unchanged and all of the “environmentally sensitive area”, “low density recreation”, “vegetation management” and “future/inactive recreation” would be converted to “low density recreation” (with the exception of the Carlton Landing area, which would be converted to “high density recreation”).
- The vegetation management policies would be changed to apply the baseline buffer vegetation management zone policy.
- MP land use classifications maps would be revised to be consistent with the SMP shoreline allocations.
- The shoreline allocations at Carlton Landing on the north side of Longtown Arm would be changed from Protected to Public Recreation. The similar request by the City of Eufaula to convert a Limited Development area to Public Recreation would also be implemented. A third request to reduce the amount of existing Public Recreation through conversion to Limited Development would be approved.
- The lease request for a public marina and other public shoreline recreational facilities at Carlton Landing would be granted.
- A channel through the standing timber in Longtown Arm would be cleared to allow boat access around Roundtree Landing to the southwest side of Carlton Landing and more direct access to the town center.

2.4.6.1 Shoreline Allocations and Land Use Classifications

Changing most of the unencumbered Protected shoreline areas to the Limited Development under this alternative would result in an 77 percent increase in shoreline miles in the Limited Development allocation. There would be 479 miles of Limited Development allocated under this alternative.

Protected allocated shoreline miles would be reduced from 430 miles under the No Action Alternative to 214 miles under Alternative 4; a 50 percent decrease. Public Recreation allocated shoreline miles would increase by 8 miles compared to the No Action Alternative for a total of 114 miles under Alternative 4; a seven percent increase. The corresponding High Density Recreation land use allocations would increase by 43 acres at the Carlton Landing area and by a net total of 2 acres with approval of the individual zoning requests. In addition, 258 acres at Carlton Landing which is currently classified as High Density Recreation would no longer be managed as Future/Inactive Recreation as it would be developed with public

recreational facilities. There would be no change to the number of shoreline miles allocated to Prohibited (**Tables 2-7 and 2-8**). **Figures 2-40 through 2-46** illustrate the shoreline allocations proposed under Alternative 4.

Under Alternative 4, which would increase the Limited Development allocated shoreline to 479 miles, there could be a potential maximum of 15,459 docks. While the actual number of docks that could feasibly be constructed would be considerably less due to the physical constraints of the shoreline, this maximum build out scenario illustrates that there is substantial potential for growth in the number of docks under Alternative 4 compared to the existing condition.

Using the projected growth rate in permit applications to project future growth in dock numbers, the maximum potential number of docks allowed under Alternative 4 would be reached in just about 100 years. The potential maximum number of docks under Alternative 3 is almost 78 percent greater than the full build out of the No Action Alternative.

Another limitation on the total number of boat docks and/or the timing at which that number might be reached is the processing time needed to review and approve shoreline permits. Under the projected growth rate in permit applications, the Eufaula Lake Project Office would need to process almost 300 new applications per year during the final decade. This is almost seven times more than the number of new permits that are currently processed annually. The number of staff that would be required to process the new applications in addition to dock renewal permits and required inspections (approximately 20 percent of existing dock permits are renewed each year) would indicate that reaching a milestone of over 15,500 docks in approximately 100 years is unlikely.

2.4.6.2 Vegetation Management Policies

Vegetation management policies under Alternative 4 would be the same as those described for Alternative 3 and would follow the baseline buffer vegetation management policy summarized in **Table 2-3**. Where high quality habitat occurs that could be impacted by vegetation modification, mowing may be restricted to no more than the first 30- feet of government land immediately adjacent to the private property for fire break purposes only.

2.4.6.3 Proposed Carlton Landing Development (Alternative 4)

Under Alternative 4, the USACE-owned shoreline along Carlton Landing shoreline and to the north of the proposed development would be changed from Protected to Public Recreation (**Figure 2-42**). The MP classification would remain High Density Recreation and the management practice for the area would change from Multiple Resource Management – Future/Inactive Recreation to High Density Recreation. This change would affect 258 acres and another 43 acres of Low Density Recreation would change to High Density Recreation for a total area of 301 acres. Approximately 5.8 miles of shoreline would be converted from Protected to Public Recreation (including on Roundtree Landing). There would be no changes to the Limited Development-designated areas along the south side of Longtown Arm. Additionally, the associated lease necessary for the construction and operation of a public marina and other public shoreline recreational facilities would be approved.

Following the approval of the rezone and issuance of a lease for the use of government land, development of Carlton Landing would proceed as proposed. As described under the No Action Alternative, the first stage of development, located in the southeastern corner of the Carlton Landing development area, closest to the town center, began in early 2011 and includes construction of utilities to up to 170 lots. Under

Alternative 4, it is anticipated that four of these lots would be developed into 125 multi-family units and the remaining lots would be developed into single-family units. The first stage of development would include a conference and retreat facility; community parks and common green spaces; and mixed-use commercial and multi-family buildings, including live/work and fractional ownership units. The fractional ownership units would be expected to include 76 two-bedroom apartments, which could be split into two separate units. Completion of this first stage of residential development would be anticipated to take five to seven years.

Subsequent stages of development would be anticipated to extend northwest from the shoreline of Eufaula Lake and would eventually include development of the 2,570 homes as summarized in **Table 2-4** in the 1,650 acre master plan area. As described in Section 2.3.3, full build-out of the 1,650 acre planned development area would also include a Kindergarten through twelfth grade school, an organic farm, a town center, community pools, public open spaces, and dog parks. Additionally, under Alternative 4, it is anticipated that there would be full build-out of proposed recreational facilities and uses on USACE lands along the shoreline; all of the amenities summarized in **Table 2-5** would be developed, including the proposed 275 to 300 boat slip marina and the nature center. Residential and mixed-use development would be expected to be fully constructed and sold at a rate of approximately 79 lots per year over a 25 to 30 year timeframe depending on market demand. The marina is proposed to begin operations in 2014.

2.4.6.4 Individual Zoning Requests under Alternative 4

Individual zoning requests to change Protected shoreline areas to Limited Development allocations may be approved under Alternative 4 if the shoreline area is not encumbered with an existing license agreement with another agency or organization. The following individual zoning requests would be approved under Alternative 4. In addition, the request to change a small area of Limited Development to Public Recreation in Eufaula (Zoning Request #3) and the request to change an area of Public Recreation to Limited Development (Zoning Request #9) would be considered under this alternative. Each request is described in detail in Section 2.3.4.

- **Zoning Request #2 – Dam North Eufaula Cliffs:** This request is to change a Protected shoreline area to Limited Development.
- **Zoning Request #3 – Lake Eufaula Association:** This request is to change a Limited Development area to Public Recreation. This zoning change would affect approximately 0.3 miles of shoreline and 9 acres of government land.
- **Zoning Request #8 – Falcon Tree:** This request is to change a Protected shoreline area to Limited Development.
- **Zoning Request #9 – Saltsman’s Orchard:** This request is to change a Public Recreation area to Limited Development. This zoning request would affect approximately 0.1 miles of shoreline and 7 acres of government land.

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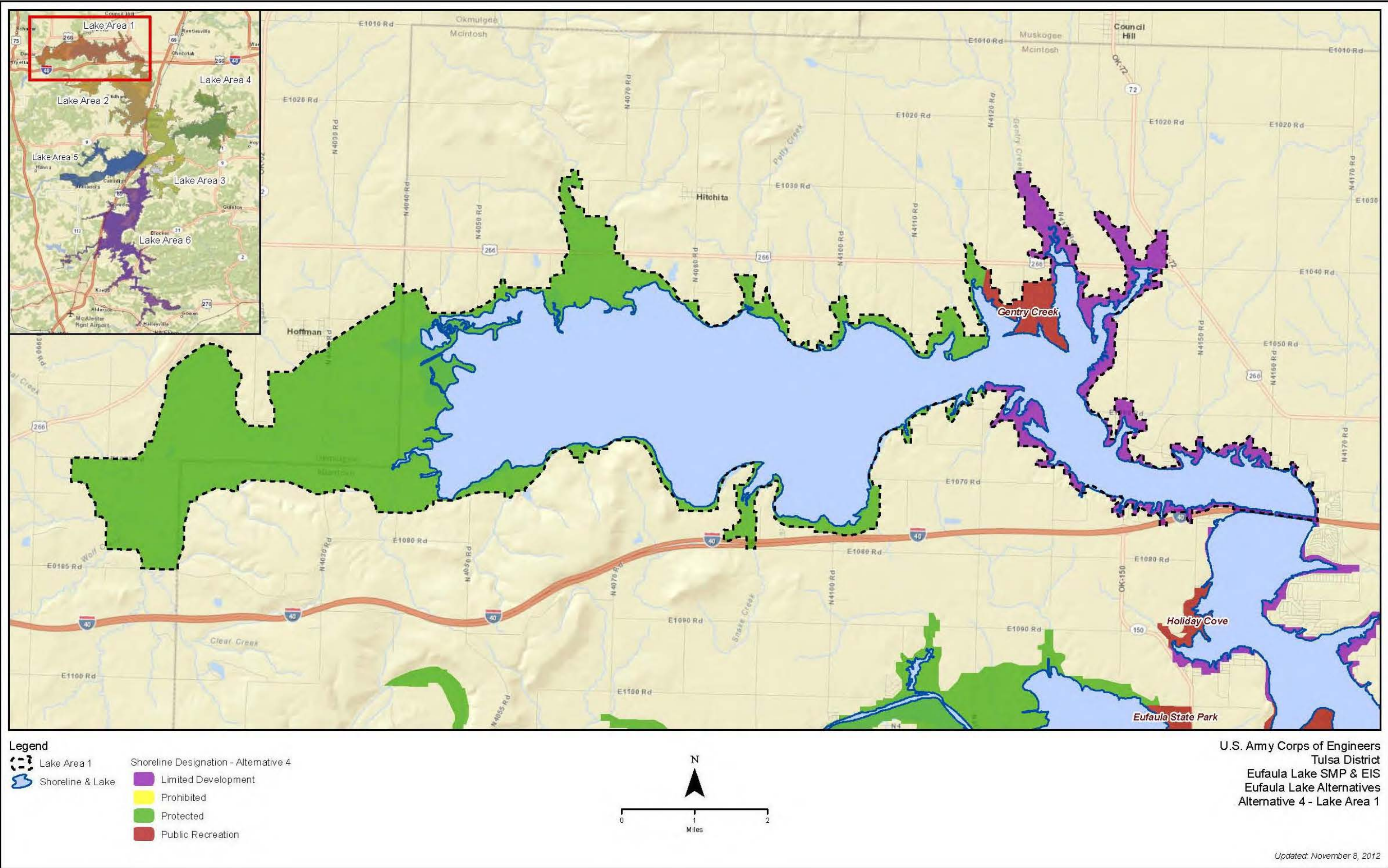


Figure 2-40. Alternative 4 Lake Area 1

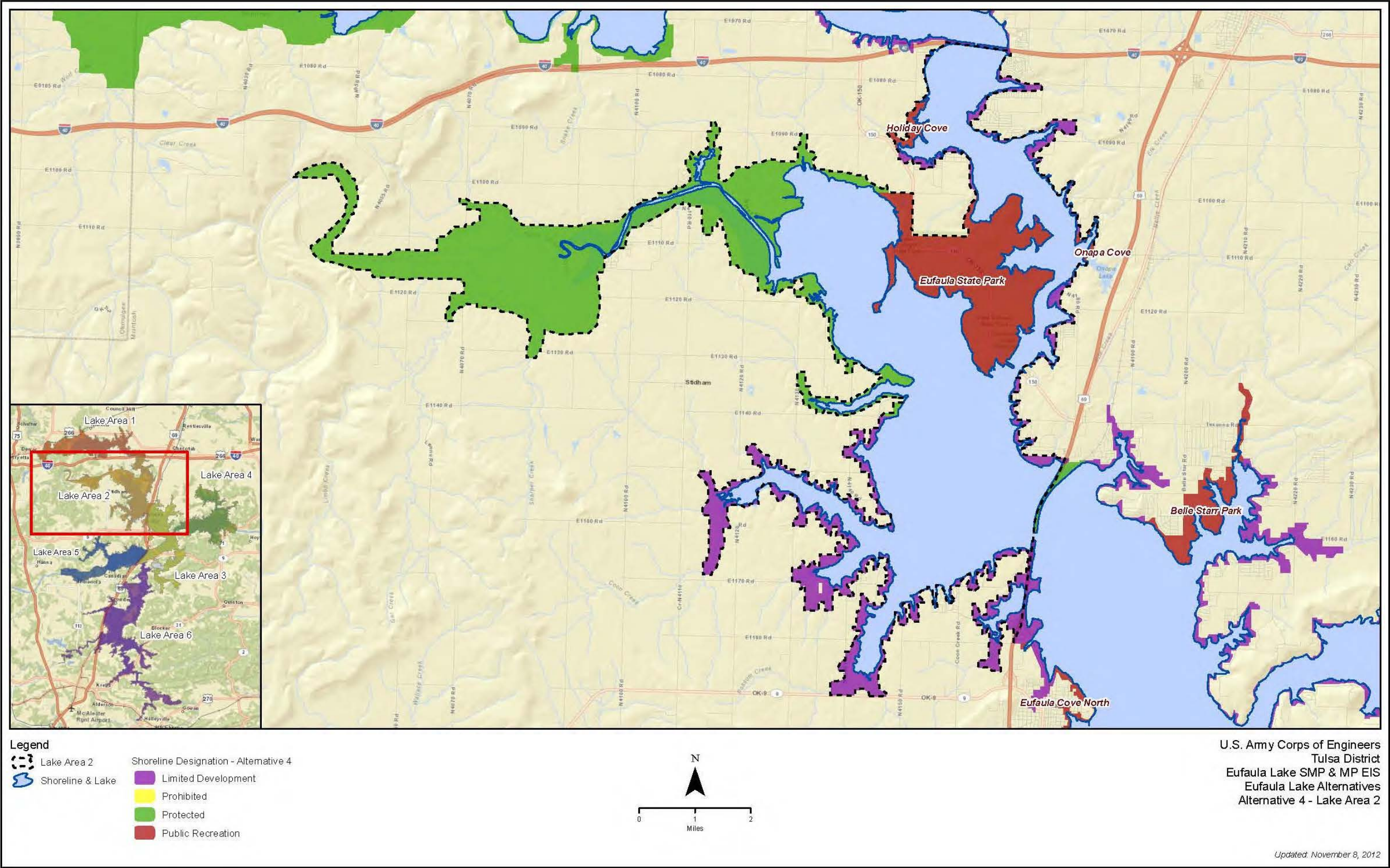


Figure 2-41. Alternative 4 Lake Area 2

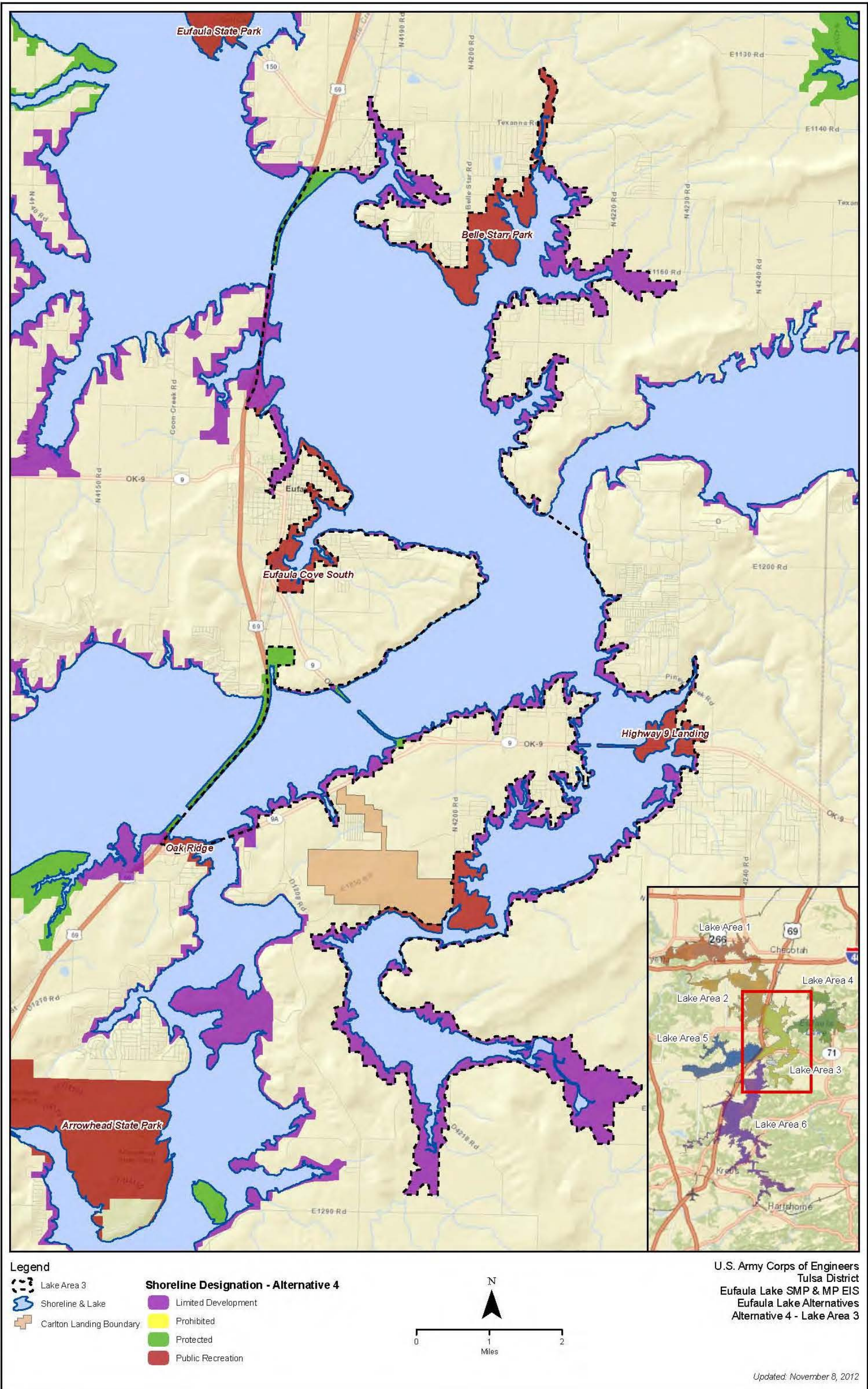


Figure 2-42. Alternative 4 Lake Area 3

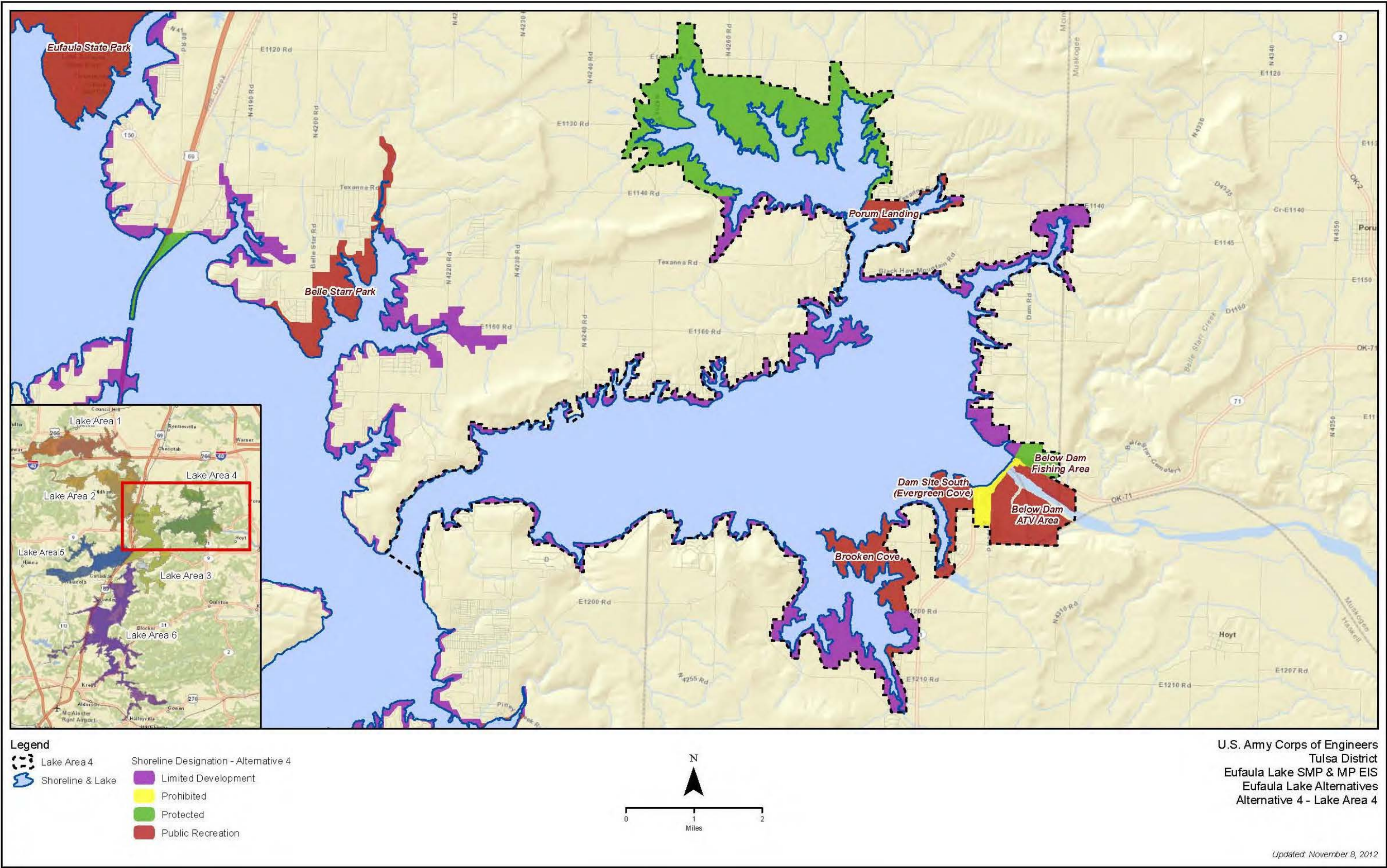


Figure 2-43. Alternative 4 Lake Area 4

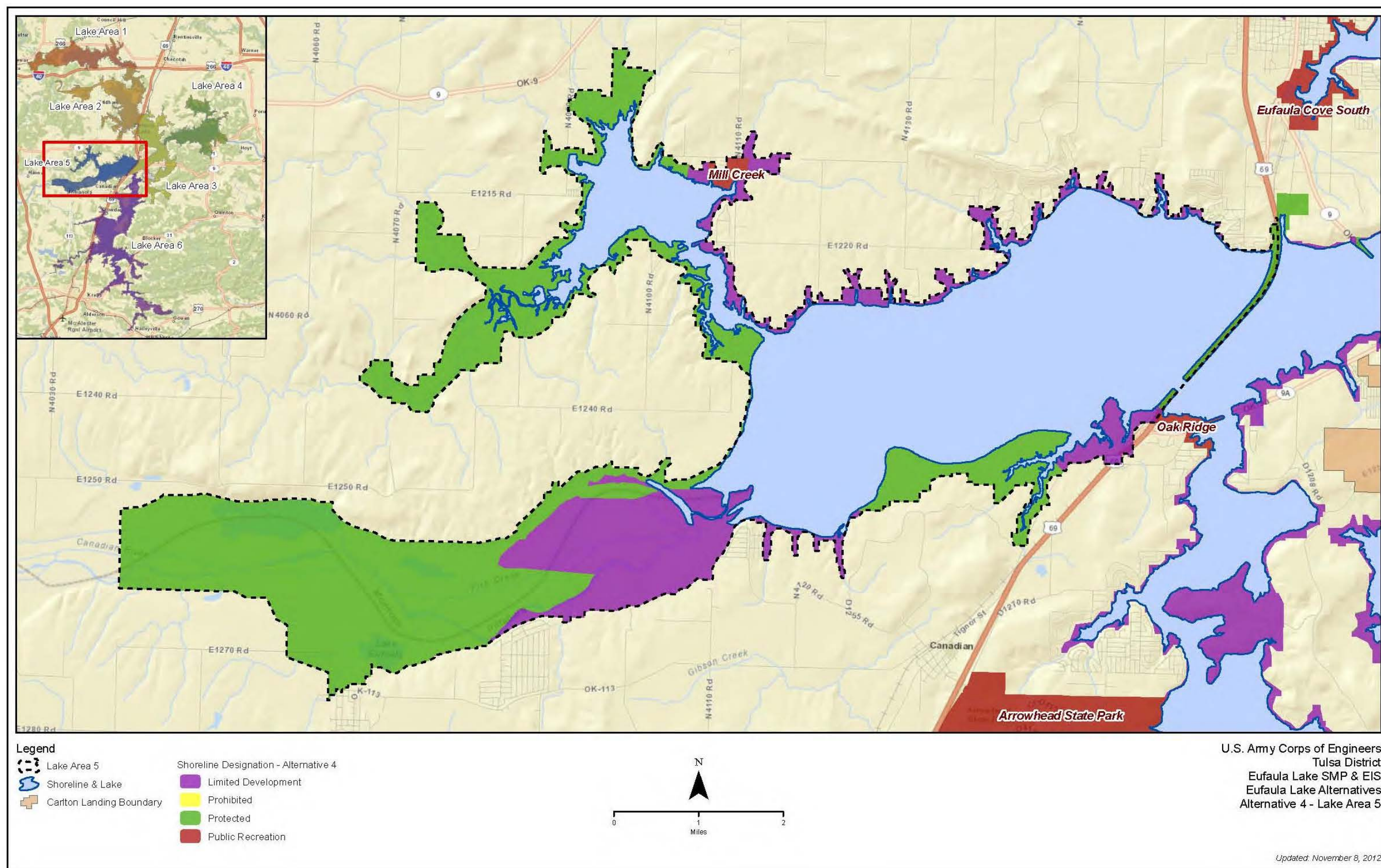


Figure 2-44. Alternative 4 Lake Area 5

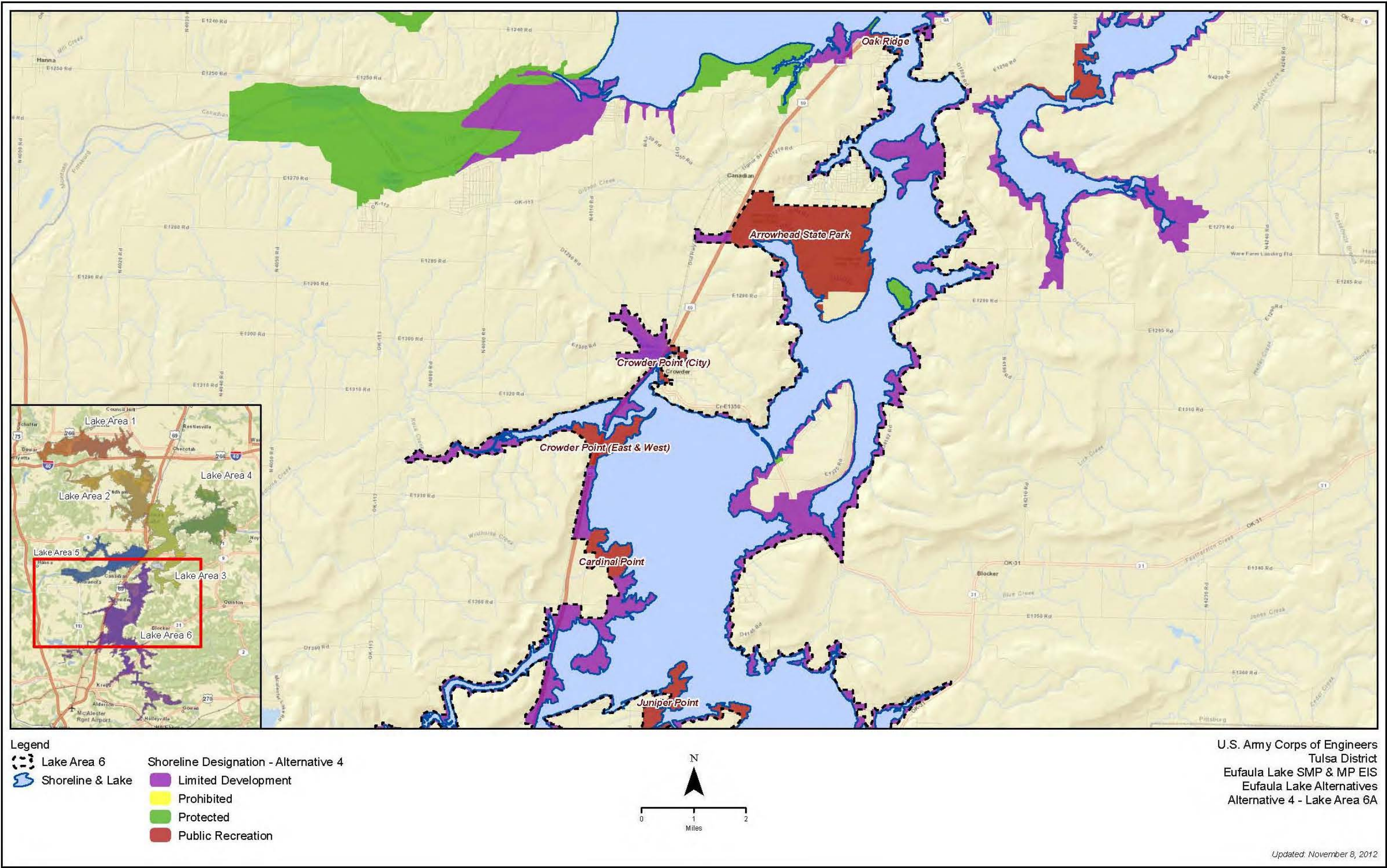


Figure 2-45. Alternative 4 Lake Area 6A

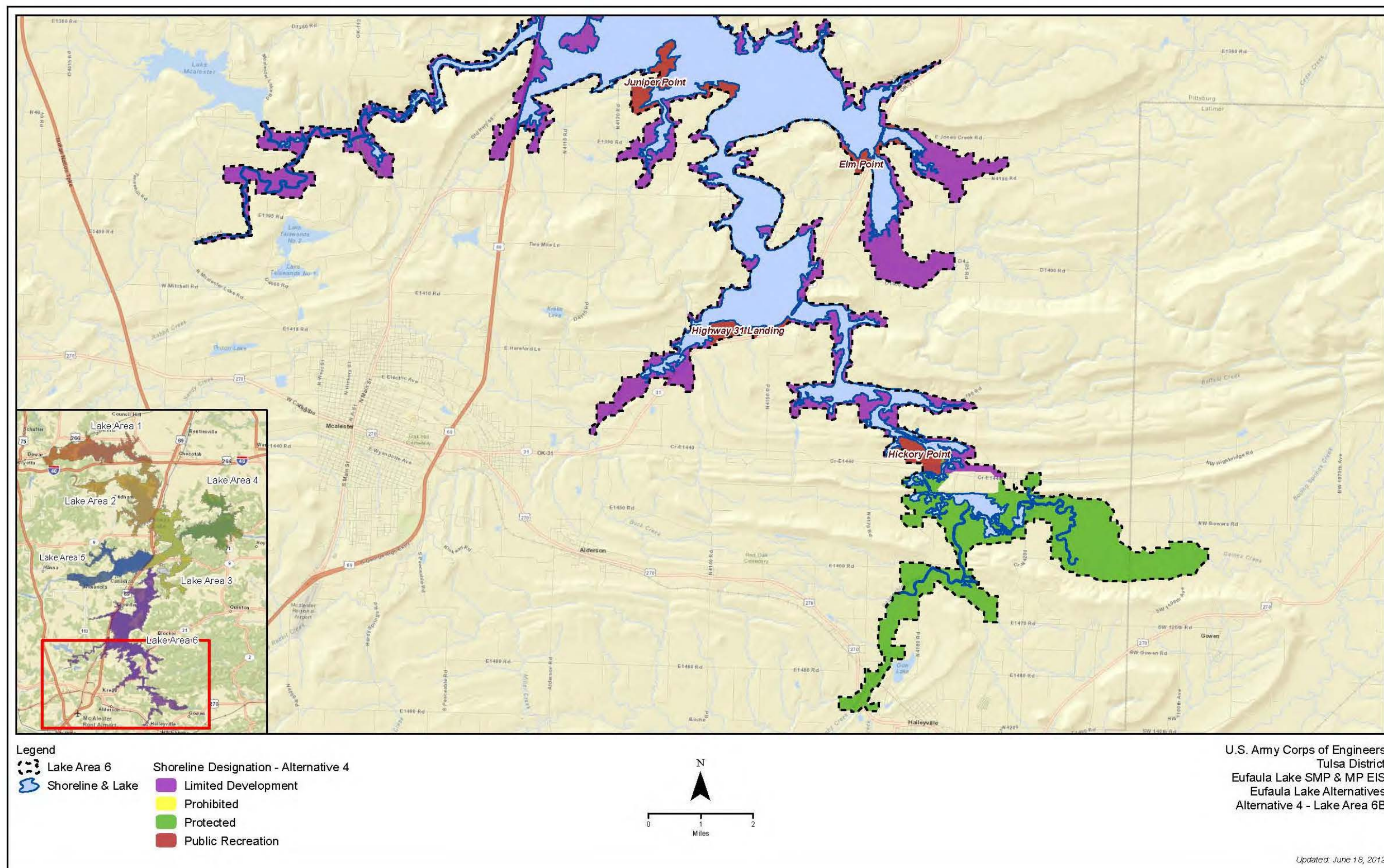


Figure 2-46. Alternative 4 Lake Area 6B

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2.4.7 Summary of Potential Impacts by Alternative

Table 2-14 summarizes the potential impacts by alternative. Alternatives are compared to the No Action Alternative. The existing condition for each resource category is described in Chapter 3. Potential impacts of each alternative are described by resource area in Chapter 4. Potential cumulative effects are described in Chapter 5.

After consideration of potential effects, it was determined that there would be minimal to no effect on a number of resource categories. These resource categories are listed below and are not included in **Table 2-14**, nor are they discussed in either Chapter 3 or Chapter 4. The detailed descriptions of the existing condition for these resource categories and the analysis of potential effects are found in Appendix H of the Draft EIS.

- Agricultural Lands
- Air Quality
- Climate Change and Greenhouse Gas Emissions
- Water Supply, Flood Storage, and Operation
- Hazardous Materials
- Navigation
- Energy
- Land Use Compatibility
- Public Infrastructure and Utilities
- Social Services and Community Facilities
- Environmental Justice

Although there were no significant effects identified related to socioeconomics and demographics, issues were raised during scoping related to socioeconomic concerns. The issues raised during scoping were primarily related to honoring the expectations of property owners who had purchased land adjacent to the lake with the expectation that they would be able to construct new or maintain existing private docks. Since socioeconomics and demographics were raised as a scoping issue, they are discussed in Chapter 3, Affected Environment and Chapter 4, Environmental Consequences of the Draft EIS. Since there are no identified effects, this issue is not included in **Table 2-14**.

Table 2-14. Summary of Impacts by Alternative

Resource Category	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Unavoidable Impacts
Vegetation, Wetlands, and Aquatic Habitats	Loss of terrestrial vegetation types, especially forest cover due to increase in potential development and recreation; potential for disruption of natural hydrology, increase in sediment and nutrient input; introduction and dispersal of invasive species; and/or impact existing populations of rare, unique and imperiled vegetation.	None – beneficial effect	Not significant	Loss of terrestrial vegetation types, especially forest cover due to increase in potential development and recreation; potential for disruption of natural hydrology, increase in sediment and nutrient input; introduction and dispersal of invasive species; and/or impact existing populations of rare, unique and imperiled vegetation.	Loss of terrestrial vegetation types, especially forest cover due to increase in potential development and recreation; potential for disruption of natural hydrology, increase in sediment and nutrient input; introduction and dispersal of invasive species; and/or impact existing populations of rare, unique and imperiled vegetation.	<p>Loss of terrestrial habitats on adjacent private lands would be significant under Alternatives 3 and 4.</p> <p>See Section 4.1.7 for potential mitigation measures.</p>

Resource Category	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Unavoidable Impacts
Fish and Wildlife	Not significant	None – beneficial effect	Not significant	Loss of terrestrial and aquatic habitat due to increased potential development and recreation.	Loss of terrestrial and aquatic habitat due to increased potential development and recreation. Adverse impact on American burying beetle at Carlton Landing.	Alternatives 3 and 4: Loss of terrestrial habitats on adjacent private lands would be significant. See Section 4.2.7 for potential mitigation measures.
Water Quality	Increases in development and recreation within existing land use designations would continue to degrade water quality through erosion, nutrient transport, and decreased dissolved oxygen	None – potential pollutant loading reduced	None – potential pollutant loading reduced	Pollutant loads would increase due to increased potential levels of development and recreation; potential for further degradation of water quality through increased erosion, nutrient transport, and turbidity.	Pollutant loads would increase due to increased potential levels of development and recreation; potential for further degradation of water quality through increased erosion, nutrient transport, and turbidity. Additional potential for increased pollutant loading from shoreline recreational development and use at Carlton Landing.	Mitigation measures would be required. Vegetation buffers provide some mitigation. See Section 4.3.8 for potential mitigation measures.

Resource Category	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Unavoidable Impacts
Geology, Soils, and Mineral Resources	Potential for erosion and soil loss due to increased development and recreational use.	Not significant	Potential for erosion and soil loss due to increased development and recreational use.	Potential for erosion and soil loss due to increased development and recreational use.	Potential for erosion and soil loss due to increased development and recreational use.	See Section 4.4.8 for potential mitigation measures. Vegetation buffers provide some mitigation.
Aesthetics and Visual Resources	Not significant	Not significant	Not significant	Visual Impact Assessment Rating “unacceptable” due to loss of forest cover.	Visual Impact Assessment Rating “unacceptable” due to loss of forest cover.	Available mitigation measures would not completely address impacts. See Section 4.5.10 for potential mitigation measures.
Cultural and Historic Resources	145 known sites located along Limited Development shorelines. Mitigation required to avoid impacts. No effect at Carlton Landing.	6 known sites located along Limited Development shorelines. Mitigation required to avoid impacts. No effect at Carlton Landing.	106 known sites located along Limited Development shorelines. Mitigation required to avoid impacts. No effect at Carlton Landing.	196 known sites located along Limited Development shorelines. Mitigation required to avoid impacts. No effect at Carlton Landing.	243 known sites located along Limited Development shorelines. Mitigation required to avoid impacts. No effect on USACE lands at Carlton Landing; potential effect on unknown resources on private lands.	Unknown sites on USACE lands would require mitigation to avoid impacts. Unknown sites on adjacent private lands would potentially be affected by indirect impacts.

Resource Category	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Unavoidable Impacts
Recreation	Boat carrying capacity of the lake would be exceeded.	Not significant	Boat carrying capacity of the lake would be exceeded.	Boat carrying capacity of the lake would be exceeded.	Boat carrying capacity of the lake would be exceeded. Capacity of some land-based recreation facilities also exceeded.	Mitigation measures may address safety but also result in degradation of recreational experience. See Section 4.7.7 for potential mitigation measures.
Noise	Increased boating use could create noise levels out of character for rural setting at some times in some locations.	Not significant	Increased boating use could create noise levels out of character for rural setting at some times in some locations.	Increased boating use could create noise levels out of character for rural setting at some times in some locations.	Increased boating use could create noise levels out of character for rural setting at some times in some locations.	Vegetation buffers and no wake zones may provide some mitigation but some impacts likely remain. See Section 4.8.8 for potential mitigation measures.
Transportation	Not significant	Not significant	Not significant	Not significant	Transportation improvements to Highway 9A and potentially Highway 9 would be needed for Carlton Landing.	Construction of highway improvements would mitigate traffic impacts; coordination with county and state transportation agencies required. See Section 4.9.8 for potential mitigation measures.

Resource Category	No Action	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Unavoidable Impacts
Public Lands and Access	Not significant	Minimal increase in new docks may limit access to lake and result in potential overcrowding at public access points.	Not significant	Not significant	Capacity of some land-based recreation facilities exceeded.	<p>Mitigation would require construction of new facilities.</p> <p>See Section 4.10.8 for potential mitigation measures.</p>

2.5 Alternatives Eliminated from Further Analysis

Alternatives eliminated from further consideration were determined to not comply with existing applicable regulations (defined in 36 CFR 327.30) and to not meet the purpose and need. These alternatives are described in more detail in the following sections.

2.5.1 Change All Limited Development to Protected (Alternative A)

Under this alternative, all Limited Development designated shorelines would be reallocated to Protected. This alternative was eliminated from further consideration because it does not meet the Purpose and Need as defined in Chapter 1. Specifically, this alternative does not:

- Assure compliance with applicable regulations (36 CFR 327.30(d)(1)).
- Improve recreational opportunities for the public at Eufaula Lake.
- Achieve a balance between private uses and the conservation of natural and cultural resources.
- Provide for the protection of private investments and honor commitments such as permits for floating facilities and existing leases to other agencies or organizations.
- Provide adequate area for future recreational facilities in areas classified as Limited Development shoreline.

This alternative was further determined to be impracticable because it would require all of the docks that currently exist on the lake to be protected under the grandfather clause of 36 CFR 327.30, which could lead to arbitrary and inconsistent interpretation of the regulations.

2.5.2 Change All Protected to Limited Development (Alternative B)

Under this alternative, all Protected designated shorelines would be reallocated to Limited Development even those that are currently encumbered with leases granted to other agencies or organizations. Similar to Alternative A, Alternative B was eliminated from further consideration because it does not meet the Purpose and Need as defined in Chapter 1. Specifically, this alternative does not:

- Assure compliance with applicable regulations requiring protection of the environment (36 CFR 327.30(d)(1)).
- Maintain the aesthetic and environmental characteristics of Eufaula Lake.
- Achieve a balance between private uses and the conservation of natural and cultural resources.
- Provide for the protection of public lands and honor commitments such as current license agreements.

This alternative was determined to be impracticable because, by definition, lands that are licensed for fish and wildlife management uses should be classified under the MP classification of Wildlife Management. This land classification is appropriately associated with Protected shoreline allocations under the SMP. If the Protected shorelines were changed to Limited Development, these areas would be inappropriately classified under the MP.

2.5.2.1 Individual Zoning Request under Alternative B

Zoning Request #1 – Duchess Creek Acres I and II – is a request to change a Protected area to Limited Development. This individual zoning request was eliminated from further consideration in this Draft EIS because the shoreline in this area is encumbered by long-term license to ODWC. The request is described in detail in Section 2.3.4.