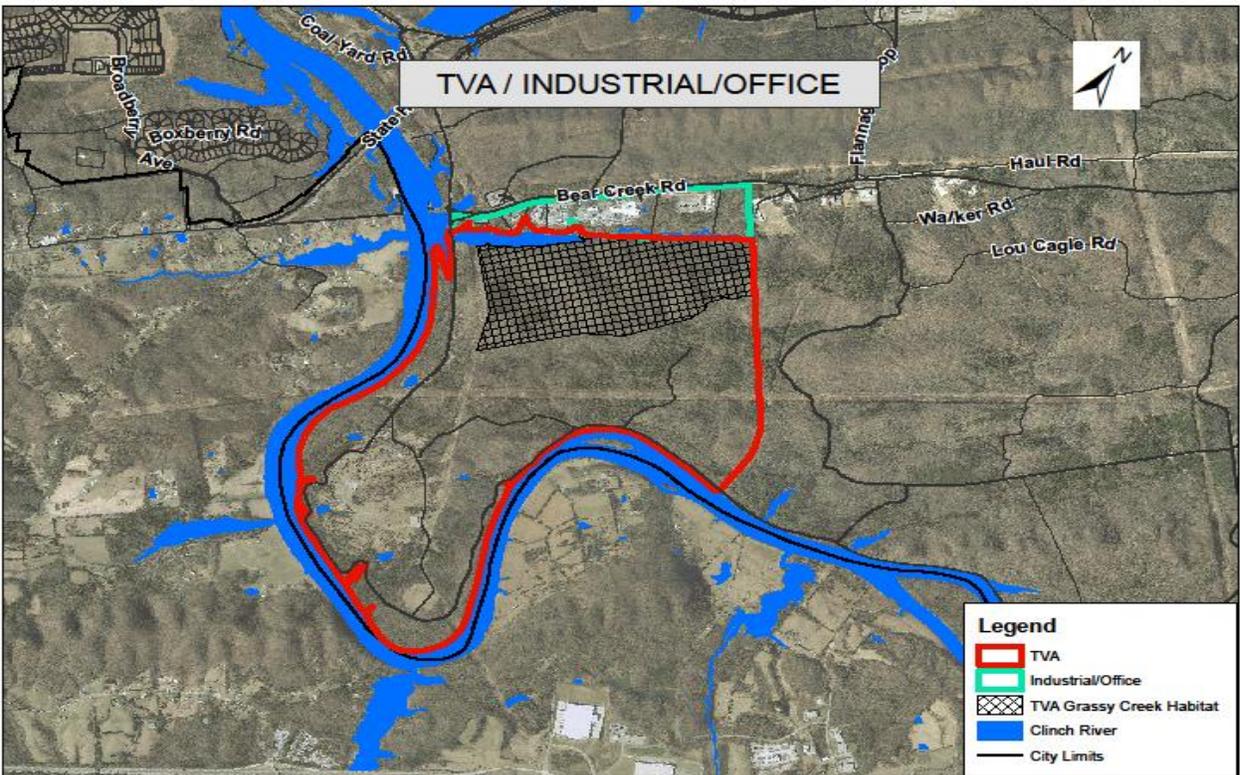


TVA SUBAREA



Location & History

This subarea borders the Clinch River in the extreme western edge of the city. It is within the corporate limits of the city, but remote from concentrations of population. Approximately half the site is encircled by the river. The 1200 acre site was proposed as a location for a demonstration Breeder Reactor project in the 1970's. (The 1200 acre total includes the 265 acre Grassy Creek Habitat Protection Area along the north edge of the property.) After years of design and controversy the breeder project was cancelled by Congress in 1983. The site is now being considered as a location for demonstration of another nuclear power technology, small modular reactors. The concept for these units is that they could be built in factories and shipped to various locations where they would provide 80 – 200 megawatts of power per unit. (For

comparison the Watts Bar Nuclear Plant is an 1150 megawatt unit.) Unlike conventional plants the modular units can be scaled up or down in power output to adjust to demand, and can be used in combination. TVA has submitted an application to the Nuclear Regulatory Commission for site approval so that the site would be ready for early use if and when a small modular reactor design is approved.

The site has direct access from Bear Creek Road via State Route 58, the Oak Ridge Turnpike, or State Route 95. The site lies only a short distance south of the Oak Ridge Turnpike with ready access to I-40, I-75 and central Oak Ridge.

Characteristics

The majority of the site is located on a peninsula on the north bank of the Clinch River arm of the Watts Bar Reservoir. The primary entrance is located at the western end of Bear Creek Road near the river. Significant site preparation was done in preparation for the Breeder Reactor Project before that project was cancelled. A ridge that reached 880 feet mean sea level was reduced to 780 msl. A concrete crane pad was installed along with several buildings. After the project was cancelled site remediation took place. Trees were planted and grass was sown, drainage management features were installed and level areas were graded and compacted. Some structures were removed.

As it sits today about half the site is undeveloped woodland, about a fourth of the land is former cropland or pasture and the remainder is scrub vegetation, wetlands, barren land, etc. The upper part of the site retains the ridge and valley pattern of the region but there are significant areas of relatively gentle slopes in the southern portion of the site. There is a small cemetery in the lower peninsula that is maintained by TVA.

Future Use

If the use of the site for a demonstration of small modular reactors does not materialize, the question will be asked, "How should this land be used?" Even though the city does not have control of that answer today, the city has a legitimate interest. Physically the land could be suited to a wide variety of possible uses: industrial development, upscale housing, park or open space land, are all possibilities. TVA could want to keep control for its own uses. DOE might want to reclaim the land for long term potential expansion of the Bethel Valley ORNL complex. Or, the land might become available for release to the city. This may be the least likely scenario, but the city should think about it in advance of being confronted with a need to make a decision.

At first impression, this land is probably best suited for industrial development. It is not close to existing residential development. Road access is good, rail access is present in the nearby ETP/Heritage site, and barge access could be provided. Even though some nice home sites could be created along the river, the area is remote from the developed area of the city and provision of city services would be expensive. The city already has an abundance of developed subdivisions with empty lots, greenspace and parkland. More detailed study would be needed for a final decision. Additional information about the site is available from TVA.