



Valley Authority

Tennessee

Frequently Asked Questions About Water Supply

Water intake permits

Why do I need a permit from TVA for a water intake?

Federal law requires it. Section 26a of the TVA Act requires that TVA approval be obtained before any construction activities can be carried out that affect navigation, flood control, or public lands along the shoreline of TVA-managed reservoirs or in the Tennessee River or its tributaries.

What permits do I need from TVA for a water intake?

A Section 26a permit is required for water intake requests that involve locating a structure in the Tennessee River or along public lands on the Tennessee River. If the activity requires the conveyance of land rights from TVA, approval by the TVA Board of Directors also will be required.

[Apply for a 26a permit here.](#)

If I get a permit from TVA, do I still need to get other permits?

Yes, other permit approvals are likely to be required. These include U.S. Army Corps of Engineers Section 404 and Section 10 permits and state permits. Check with your state water supply permitting agency.

Who do I talk to if I have questions?

General water supply questions should be directed to Chuck Bohac (423-751-7319) or Gary Springston (423-751-7336) at TVA. Questions regarding 26a water supply permit applications should be directed to your local TVA Watershed Team.

[View a list of TVA Watershed Teams.](#)

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How long does it take to get a 26a permit?

It depends on the level of environmental review required

by the permit, how extensively permit requests are coordinated, and available administrative resources. On most minor projects that meet construction guidelines, approval typically will be received within 45 days. On major projects where modifications are not required, approvals typically will be received within 90 days. Some projects that are complex or involve substantial environmental or engineering issues may require the preparation of an Environmental Assessment or an Environmental Impact Statement. On these projects, TVA will meet with applicants to determine schedule and costs of project review.

How much does a 26a permit cost?

The cost for permits varies depending on the location of the intake and the extensiveness of associated reviews. Contact one of TVA's Watershed Teams for more information, or [go here](#).

What type of information do I need to supply when requesting a water intake permit?

View additional [information required for 26a water intake requests](#) here.

Can I put a water intake anywhere?

Many factors come into play when determining whether a site is suitable for a water intake. These include, but are not limited to, low flows, archaeological sites, water quality, threatened and endangered species, downstream users, etc. Applicants should contact the appropriate TVA Watershed Team for preliminary information before investing time and money in siting a water intake.

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How much water am I allowed to withdraw?

The amount of water that is allowed to be withdrawn from a waterbody is dependent upon many factors, including need, low flow conditions, aquatic habitat, and other environmental conditions. All applications for a 26a water intake permit must include a documented need for the requested volume of water. TVA will review the request and evaluate its associated environmental impacts to determine the appropriate volume of water that can be withdrawn, taking into account factors such as operation of the river system and impact on the river environment.

How can I tell how much water I will be withdrawing?

Most large water intakes monitor the volume of water

being withdrawn through the installation of a metering device. For small-capacity intakes, such as an irrigation intake, installing a metering device can be costly and impractical. Under these circumstances, landowners can estimate the daily volume of water withdrawn by multiplying the capacity of the pump (usually gallons per minute) by the number of minutes that the pump operates each day.

If I want to use a small portable pump to water my garden, do I need a permit?

If there are no permanently fixed components or pipelines crossing TVA property, a permit or other TVA approval may not be needed. Landowners should contact their local [TVA Watershed Team](#) for permit requirements.

Can TVA guarantee that my intake will always be covered by water?

TVA does not guarantee that water intakes will always be under water. The amount of water in the Tennessee River system depends partly on how the system is operated but mostly on the amount of rainfall and runoff each year.

TVA takes into account the needs of water intake structures when it manages the river system, but the design and location of intakes largely dictate whether or not they will or can be dewatered. Intake operators should have an emergency plan in place to acquire water in the event water levels drop due to atypical circumstances such as drought or dam maintenance activities.

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Are there any requirements for a discharge line from a water treatment plant?

Yes. TVA requires that the discharge line operator obtain a permit under the state's National Pollutant Discharge Elimination System program. The line also must contain a diffuser on the end, be located in the original river channel, and be at least 10 feet below normal winter pool elevation. Depending on the presence of sensitive resources, such as threatened or endangered species, there may be other requirements.

What type of environmental reviews do TVA and other agencies conduct for water intake requests?

Several different federal statutes can dictate what kind of environmental reviews must be undertaken by TVA and other federal agencies before they can approve or permit private intake facilities. These can include evaluations

under the National Environmental Policy Act, National Historic Preservation Act, and the Endangered Species Act. The environmental reviews conducted on the state level follow environmental regulatory policies and laws established by that state.

Will my intake be inspected by TVA?

All permitted water intakes are subject to inspection by TVA.

Does TVA need to know how much water my intake withdraws each year?

Yes. As a condition of the water withdrawal permit, applicants are required to report annual usage. This data is used in tracking existing usage and evaluating proposed increases in withdrawals from the Tennessee River system. [Click here for a copy of the annual usage reporting form](#) (158 kb, PDF).

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Intake water quality

If there is an emergency spill and/or there are hazardous chemicals in the water, will I be notified so I can stop my withdrawal until the danger passes?

TVA maintains a database for emergency contacts for each water intake. If TVA is notified by local and state agencies that a spill has occurred, our current practice is to try to forward this notice to water intake operators when we have emergency contact numbers for them. However, operators should not rely solely on receiving notice from TVA but should also ensure that the appropriate local and state officials know how to contact them. Intake operators should be sure to notify TVA when their emergency contact information changes.

How do I know if the water I get from my water supplier meets drinking water regulations?

By July 1 each year your water supplier should mail you a short report explaining where your water comes from and what is in it. Some suppliers also post a copy of this report on their Web site. For more information, contact your local water supplier.

What are disinfection by-products, and why are they a concern?

Disinfection by-products (DBPs) form when chlorine or other disinfectants react with the organic material (from decomposed leaves and other vegetation) naturally found in drinking water sources. The two classes of DBPs

usually measured in drinking water are trihalomethanes and haloacetic acids. Many DBPs have been shown to cause cancer and reproductive or developmental effects in animal studies. The level of DBPs permitted in drinking water is regulated by EPA and monitored by water treatment plants. To inquire about DBPs, contact your local water supplier.

What is cryptosporidium?

Cryptosporidium is a one-celled parasite that can cause a gastrointestinal illness called cryptosporidiosis. The parasite is commonly found in lakes and rivers, especially when the water is contaminated with sewage and animal wastes. Cryptosporidium is very resistant to disinfection, and even a well-operated water treatment system cannot ensure that drinking water will be completely free of this parasite.

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What can I do about improving water quality around my intake?

There are many locally led efforts throughout the Tennessee Valley to improve water quality conditions in reservoirs, rivers, and streams. To learn more about these efforts, contact your [local Watershed Team](#) or your state's water quality regulatory agency.

Interbasin transfers**What is the concern with transfers of water from one river basin to another?**

Water transferred from rivers via interbasin transfers can upset the established balance of water uses upstream and downstream. Interbasin transfers also can impact the overall ecological health of the donor and receiving systems. Any proposed transfers need to be carefully scrutinized to ensure the long-term sustainability of the water resource as well as the protection of public health, safety and the environment. Impacts from an interbasin transfer can occur not only at the extraction point but in tributary reservoirs or streams hundreds of miles away.

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What is TVA's position on the interbasin transfer of water out of the Tennessee River basin?

TVA's primary interest is ensuring that it is able to carry out its mandated responsibility for managing the Tennessee River system, including maintaining the balance of beneficial uses of the Tennessee River (i.e.,

navigation, flood damage reduction, water supply, power generation, aquatic life, and recreation). Any water transfers that have the potential to alter the current system balance or impact the ecological health of the donor or receiving water body would be carefully evaluated by TVA, Valley states, and stakeholders within the TVA region before the transfers would be allowed.

As a regional development agency, TVA designed and operates the integrated power and river system to support the sustainable economic development of the Tennessee Valley region. For that reason, TVA continues to work with communities within the Valley region to help meet their local water supply needs. It should be recognized, however, that every river or stream has a finite carrying capacity in terms of being able to support continued economic growth and development within a region while at the same time the ecosystem and other beneficial uses provided by the system are protected. Transfers of large quantities of water outside the Valley therefore have the potential to impact future growth within the region, as well as other benefits provided by the system. The severity of the impacts would depend on when and where the transfers occurred.

What is TVA's role if municipalities not located in the Tennessee River watershed seek federal policy changes to transfer water out of the river basin?

In response to proposals to change federal policies that may govern the transfer of water out of the Tennessee River watershed, TVA would work very closely with members of Congress, state and local officials, and other interested stakeholders to address the potential impacts of proposed changes to better ensure that any decisions to change policies are made with full awareness of the consequences.

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Isn't Tennessee River water already being transferred out of the river basin to serve as potable supplies for municipalities?

Yes. Water transfers for potable supplies are already taking place. A number of water supply utilities lie on or very near the Tennessee River basin boundary. Along these fringe areas, water is transferred into or out of the basin depending on water suppliers' local service territories. The net effect of water going out of the basin

versus water coming into the basin from these transfers is minimal.

In terms of existing pipelines installed to accommodate interbasin transfers, Fort Payne, Alabama, currently has a pipeline that transfers about four million gallons a day (mgd) from the Tennessee River system to meet local needs. The city of Tupelo and Lee County, Mississippi, also have a pipeline that takes about 10 mgd from the Tombigbee River, which takes water from the Tennessee-Tombigbee Waterway just downstream of the Jamie Whitten Lock. This water also comes primarily from the Tennessee River system.

Are there areas with water-supply constraints near the Tennessee River watershed that are likely to be looking for additional sources for water in the future?

Yes. Northeast Mississippi (including portions of Alcorn, Tishomingo, Prentiss, Itawamba, and Lee counties) is looking to the Tennessee River near Pickwick Reservoir for additional water to supplement or replace declining groundwater supply sources. TVA is currently reviewing a permit request from Corinth, Mississippi, to withdraw an annual average of 8 to 10 mgd, with a maximum of 16.5 mgd, from the divide between Pickwick Reservoir and the Jamie Whitten Lock on the Tennessee-Tombigbee Waterway to meet local water supply needs. Approximately 80 percent of this water would be considered an interbasin transfer, since the remainder would be used to supply needs within the watershed boundaries.

Blount County and Birmingham, Alabama, which is a large metropolitan area located on a relatively small river, are rapidly outgrowing available water supplies. The distance from Birmingham to Decatur or Guntersville on the Tennessee River is less than 80 miles, a reasonable piping distance by today's standards. Cullman County, Alabama, is another area within TVA's power service region that is facing water-supply constraints.

Dalton, Georgia, in Whitfield County, was successful recently in contracting with a water utility on Chickamauga Reservoir to purchase up to 10 mgd, and additional purchases can be expected as the Dalton area continues to grow. Walker and Catoosa counties are already purchasing some water from a utility on the

Tennessee River, and increased purchases are inevitable if the 20 to 30 percent growth rate of the past decade continues.

Water demand for the Atlanta metropolitan area will continue to grow, and while in-state water resources may be sufficient for another 20 years, the Tennessee River is the nearest water body with enough volume to meet a major portion of Atlanta's future water demand. The entire northwest Georgia area above Atlanta is growing rapidly and exceeding the capacity of existing groundwater and surface water supplies.

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Since TVA is responsible for managing the Tennessee River system, what action is TVA taking to ensure that sufficient water will be available to meet the water supply needs of residents within the Valley region in the future?

TVA has recently inventoried all the current water supply extraction points within the basin to determine how much water is being used daily. The results indicated that an estimated 12 billion gallons of water were extracted daily. Of this, TVA estimates that approximately 95 percent is returned to the basin for further downstream uses. Water currently transferred out of the basin via pipelines for water supply purposes amounts to about 15 mgd, or about 0.125 percent of the total water extracted daily from the system.

As a result of anticipated requests for more and larger interbasin transfers via pipelines traversing longer distances, TVA has instituted the following requirements associated with water supply and interbasin transfer requests:

- All permit requests must be accompanied by a needs analysis demonstrating the need for the amount of water requested.
- The state government in which an interbasin withdrawal is to occur must not object to consideration of the request for an interbasin transfer of water.
- Since the Tennessee River system is a shared resource, all seven Valley states will be informed of all transfer requests, and a dialogue will be maintained between TVA and the various states during the review process.

- All interbasin transfers will be assessed as to their impacts on the overall river systems, including the location and significance of environmental and/or operational effects.
- Each permit will specify limits on the amount of water to be extracted and/or transferred from the Tennessee River system.
- Permits will be granted for a finite amount of time, after which they must again be renewed by TVA.
- Annual reporting to TVA will be required in order that TVA can track trends in overall water extractions and transfers of water from the Tennessee River system.
- A condition will be included in all future permits to prohibit the sale, distribution, or transfer of water beyond the locally served area referenced in the permit application.
- A condition will be included in all future permits to prohibit water from the Tennessee River system being used as a replacement for local water that is sold, distributed, or transferred outside the local area.

If water is transferred outside the Tennessee River system and not returned to it, isn't there a loss of hydropower generation at downstream dams?

Yes. Lost hydropower generation as a result of less water passing through downstream turbines must be replaced by more expensive means. Since all of TVA's operations are now funded by ratepayers in the TVA power service area, all interbasin transfers of water outside the area will require reimbursement to TVA in an amount that recovers the lost hydropower benefits.

Other questions

What is consumptive loss?

Consumptive loss is defined as withdrawals from a river system minus returns to the river system. It is the part of the water withdrawn that is evaporated, transpired, incorporated into plants or crops, consumed by humans or livestock, or otherwise removed from the immediate water environment.

What are some things I can do to conserve water?

There are many steps that citizens can take to reduce the unnecessary use of water. These range from fixing a leaky faucet to hiring professionals to conduct water

audits of your home or business.

[Learn more about water conservation here.](#)

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