

# LAKE BOWEN IRRIGATION PLAN

## ***Lake Bowen History/Purpose***

Lake Bowen is a man-made water supply reservoir that was constructed in 1960. The reservoir is owned and managed by the Spartanburg Water System (SWS). The reservoir receives water from the South Pacolet River and its tributaries. The dam is located on the South Pacolet River. The watershed for the reservoir encompasses 82 square miles of land area. The surface area of the reservoir is approximately 1,600 acres.

The primary purpose of Lake Bowen is to provide drinking water to SWS's service area. Secondary purposes of the reservoir include providing recreational opportunities such as boating and fishing, as well as educational opportunities for users of the lake. Adjoining landowners' access to Lake Bowen and the buffer land around it is by permission of the owner, SWS. SWS is responsible to the citizens of the area to manage Lake Bowen to ensure that it remains a source of high-quality drinking water to serve them. Adjoining landowners' access to Lake Bowen and its buffer zones is always secondary to Lake Bowen's use as a source of drinking water. Whenever adjoining landowners are granted such access, it is with the express understanding that SWS may terminate that access whenever SWS determines that doing so is necessary to protect SWS's interest in effectively managing the lake.

## ***Lake and Buffer Ownership***

SWS owns in fee simple title the lakebed and shoreline at Lake Bowen to an elevation of 827 feet above MSL around the Lake Bowen reservoir. In some areas, such as the Lake Bowen Park, SWS owns lands above the 827 elevation. SWS from time to time may post signs and markers along the SWS boundary at specified intervals to assist in identification of the property boundary. Removal or defacing of such signs is a criminal act. See S.C. Code Ann. § 5-31-1120. If you are uncertain about the limits of SWS property around Lake Bowen, please contact the Lake Bowen Warden's office at 864-592-2240.

## ***SWS Authority/Jurisdiction***

The Commissioners of Public Works of the City of Spartanburg (Commission) operates SWS and Lake Bowen under authority granted by the General Assembly of South Carolina in 1896. See 1896 S.C. Acts 83. The 1896 statute grants SWS the authority to build, maintain, and operate facilities needed to meet the water supply needs of its service area. Later Acts provided for the election of the Commission and established the SWS service area. Under its statutes, SWS has the responsibility and legal right to take all action necessary to maintain and protect its

water system, including capital assets such as Lake Bowen, and to ensure that these assets have a long and useful lifespan.

This Lake Bowen Irrigation Plan is a regulation of SWS having the full force and effect of law. Under Section 22-102 of the Spartanburg Municipal Code, SWS regulations are enforceable as Spartanburg city ordinances through fines of up to \$500 or 30 days in jail per violation. See S.C. Code Ann. § 5-7-30.

Under other statutes, unauthorized activities on buffer properties can constitute tampering with the property or appurtenances of SWS's system, which is a criminal offense. See S.C. Code Ann. § 5-31-1120. Likewise, it is a crime to pollute the water supply of any city water system. See S.C. Code Ann. § 5-31-1130. In addition, permittees who violate an irrigation permit are also guilty of a criminal offense under South Carolina law. See S.C. Code Ann. § 5-31-1140. All these offenses can result in criminal fines of up to \$200 and 60 days' imprisonment. See S.C. Code Ann. § 5-31-1170.

In addition, unauthorized activities on buffer properties constitute acts of trespass under South Carolina law, making the persons involved liable for criminal prosecution and for damage claims for any injury to SWS property. Those damage claims can include the cost of restoring any injury to vegetation and any injury to the quality of the water supply in Lake Bowen. In addition, under statutes related to the unlawful taking of timber, SWS can recover three times the value of any commercial or noncommercial timber removed from its property. See S.C. Code Ann. § 16-11-615; Wimberly v. Barr, 359 S.C. 414, 420, 597 S.E.2d 853, 856-57 (Ct. App. 2004).

Lake Wardens, all of whom are South Carolina Constables, can issue citations for criminal violations and for permit violations. These wardens will be the primary means of enforcement and monitoring of the Lake Bowen Irrigation Plan.

## ***Plan Need and Purpose***

Lake Bowen provides an excellent source of high quality drinking water for the people of the Spartanburg area. Protection of this resource is needed to ensure that current and future generations will continue to enjoy drinking water from the reservoir and also have excellent opportunities for outdoor recreation and education. Protection of the reservoir begins with the surrounding watershed and associated land use practices. This Lake Bowen Irrigation Plan provides guidance on many issues that will ensure protection of water quality and quantity within Lake Bowen and further ensures that conservation objectives are met during times of drought. Specific purposes of the plan include, but are not limited to:

- Protecting water quality and quantity within Lake Bowen
- Providing the public and SWS staff with a tool to evaluate proposed irrigation activities within the buffer
- Educating reservoir users about the importance of water conservation and water-efficient landscape practices
- Establishing clear guidelines for allowable irrigation activities within the buffer

- Protecting sensitive resources
- Protecting and maintaining Lake Bowen for future users

The Lake Bowen Management Plan applies to use of Lake Bowen, all SWS-owned buffer areas, and to property adjacent to the SWS-owned buffer areas around Lake Bowen.

### ***Prohibitions***

1. Except for SWS operations, no withdrawal of water from Lake Bowen for any purpose or in any manner shall be made unless such withdrawal complies with the requirements of this Plan.
2. Withdrawals for any purpose other than firefighting and residential irrigation are prohibited.
3. Discharge of pollutants into Lake Bowen is prohibited.
4. No irrigation permits shall be used to irrigate property that is not adjacent to Lake Bowen.

### ***Permits and Authorizations***

Previously, SWS required registration of existing private irrigation systems used to withdraw water from Lake Bowen for watering lawns and other landscape plants. Given the nature of the reservoir as a water supply source and concerns raised as a result of recent drought conditions, all pre-existing registrations are no longer valid effective January 1, 2010. As of January 1, 2010, no person shall withdraw water from Lake Bowen for irrigation purposes without first obtaining a permit from SWS. All irrigation permits must be reauthorized on an annual basis. To ease tracking of irrigation permits, they will be valid for one calendar year and will expire on December 31 of each year. Those parties not obtaining appropriate permits or authorization from the SWS or not following the conditions of the permit will be subject to enforcement.

### ***Permit Requirements***

Property owners adjacent to Lake Bowen wishing to withdraw water from Lake Bowen for irrigation purposes must submit an application on an annual basis to the Lake Warden's office. The application fee to initiate lake irrigation for a property owner adjacent to Lake Bowen is \$115.00. Once permitted, the annual renewal fee for residential irrigation is \$40.00. Property owners adjacent to Lake Bowen who have previously registered their irrigation system with Spartanburg Water and who have a valid identification tag for their irrigation pump are required to pay the renewal fee as submitted with their annual reapplication. Only one irrigation pump will be allowed for each property adjacent to Lake Bowen. Approved permits will include a validation sticker that must be prominently displayed on the irrigation system identification tag.

The Lake Wardens will review the permit application and issue permits. No irrigation water can be withdrawn from the lake without a valid permit. A permit application for irrigation shall be approved if the following criteria are met:

1. Irrigation permits are valid for residential (domestic) irrigation only. Commercial operations are not eligible for irrigation permits under the Lake Bowen Irrigation Plan.
2. The cumulative total coverage area of all zones attached to the irrigation system does not exceed one (1) acre in size.

### ***Permit Conditions***

An approved permit is subject to the following conditions:

1. Hydraulic loading rate applied to soils does not exceed one inch per acre per day of permitted application.
2. Irrigation is suspended during rainfall.
3. Irrigation system is turned off should run-off occur.
4. Irrigation system permittee must agree to adhere to any and all water conservation measures and water use restrictions upon notification by Spartanburg Water System.
5. During normal conditions, operation of irrigation systems that withdraw water from Lake Bowen will be allowed only on Wednesday, Thursday, Saturday and Sunday of each week.
6. Water withdrawn from the lake is for non-potable use only.
7. Electrical equipment and wiring used to power irrigation pumps must be ground faulted.
8. Electrical wiring used to power irrigation pumps must be placed within a conduit or be of a quality that is able to be buried underground. Wiring placed in electrical conduit may be directly attached to a permitted hard surface walkway.
9. All trenching for electrical conduit or burying of wiring must be done with minimal soil disturbance and compaction. Disturbed soil areas should be redressed and restored so that soil erosion does not occur.
10. The permittee must execute a Spartanburg Water System Addition of Electricity within SWS Buffer Area Agreement.
11. In order to prevent septic run-off into Lake Bowen that may occur due to over-saturation of the soil, the permittee must keep his/her septic tank and associated drain fields in proper working order. Between the hours of 9:00 a.m. and 5:00 p.m., the permittee authorizes SWS to enter upon his/her property to periodically perform inspections of the septic tank and drain fields to assure proper functioning. Should SWS observe potential or apparent problems, SWS will contact the property owner and refer these issues to the South Carolina Department of Health and Environmental Control (SCDHEC).
12. Any other condition warranted by unusual site conditions.

### ***Permit Revocation or Denial***

A variety of permits, including irrigation permits, are needed for activities within the Lake Bowen buffer area. For individuals who possess Lake Bowen irrigation permits, compliance with all aspects of the permit is a condition for being allowed to maintain any other permit or authorization SWS issues. Violations of the terms of this plan or any permit may result in the revocation of all permits (including recreational boating permits) held by a landowner. Unless all matters related to the violation are resolved promptly and to the satisfaction of SWS—including the payment of any assessments—SWS may remove structures on buffer property,

including docks, irrigation facilities, and walkways, and dispose of them at the permittee's expense. No additional permits will be issued with reference to any parcel of property until all existing issues related to a violation are resolved, including restoration of any damage and payment of all required fines and assessments. The transfer of title while violations remain unresolved will not remove the suspension.

If irrigation permits expire without renewal or are revoked, any irrigation authorized under the expired or revoked permit must immediately cease. Upon revocation of an irrigation permit or expiration of an irrigation permit without renewal, all associated irrigation equipment shall be removed from the SWS buffer within 45 days from the date of revocation or expiration. After that time, SWS may have the equipment removed and disposed of at the owner's expense.

## ***Exceptions***

SWS may grant an exception to any of the above criteria for a permit or conditions within a permit or the above prohibitions if either of the following criteria is met:

1. The subject property is benefited by a valid appurtenant easement, not abandoned, released, waived, or otherwise terminated, upon a SWS buffer area, and this Plan's prohibitions or permit criteria or conditions clearly and unambiguously conflict with reasonable use of that easement.
2. There are extraordinary and exceptional conditions pertaining to the subject property which:
  - a. do not generally apply to other property adjacent to Lake Bowen;
  - b. due to these conditions, the application of this Plan to the subject property would effectively prohibit or unreasonably restrict the use of the property.

If the requirements of subsections 1 or 2 are met, then SWS may authorize an exception if:

1. connection to or use of treated water is an unfeasible alternative;
2. considering the cumulative effect of all withdrawals authorized by permit or exception, grant of an exception for the subject property will not cause the pool level of Lake Bowen to fall below 809.00' MSL;
3. authorization of an exception will not impair the water quality of Lake Bowen; and
4. the withdrawal amount per day is kept at the absolute minimum necessary to enable reasonable use of the property.

In the event that an exception is granted, SWS shall establish a maximum withdrawal amount per month, and the recipient of the exception must, at his or her own expense, install a water gauge to measure withdrawals and submit monthly reports to SWS of actual withdrawals per month.

An exception granted by SWS is valid for a one-year period with the option of annual renewal so long as the criteria stated above is met for each subsequent year that the requested exception is sought.

If withdrawals exceed the established maximum withdrawal amount per month during any two months out of the year for which the exception applies, SWS shall terminate the exception.

## ***Enforcement***

Non-compliance with the Lake Bowen Irrigation Plan or with the terms of any permits or authorization issued under it can involve several levels of enforcement, depending on the specific situation. SWS will make reasonable efforts to work with and provide information to permittees and adjacent landowners to avoid or resolve non-compliance with the irrigation plan. If a resolution suitable to SWS cannot be reached through this coordination, SWS will take additional steps to ensure compliance. Enforcement options include, but are not limited to, those presented below.

### ***Fines and Penalties***

In appropriate circumstances, SWS has the authority to enforce the Lake Bowen Irrigation Plan through the issuance of citations for fines and other criminal penalties for non-compliance with the Lake Bowen Irrigation Plan pursuant to section 1-11 of the City of Spartanburg Code of Ordinances and state law. These include fines of up to \$500 per occurrence and imprisonment for up to 60 days.

### ***Assessments for Costs and Damages***

As indicated above, SWS may assess a violator for all SWS's costs and damages arising out of a violation of the plan, which can include such things as: the damage to Lake Bowen as a source of water; the value of lost timber or vegetation or the cost of restoration of any damage to soils, timber, or vegetation; SWS staff time and administrative costs for responding to the violation; and SWS's fees and costs for consultants, experts, and attorneys to assess the damages and prosecute the claim.

### ***Severability***

If any section, subsection, or clause of this Plan is deemed unlawful by a court of competent jurisdiction, the validity of the remaining sections, subsections, and clauses shall not be affected.