1. Obed and Big South Fork ........................ p. 3
   A. NPS’s revisions of oil & gas regs have major bearing on BSFNRA
   B. Protecting Obed habitats from climbing damage
   C. BSFNRA in list of ten that typify threats to parks
   D. Obed wins another Keeper of the Light Award
   E. Paddler information

2. Tennessee news ................................. p. 4
   A. Tennessee Wilderness Act, latest update
   B. Leadership changes for two major Tennessee land-protection groups
   C. Holston River pollution to be reduced
   D. Harpeth Watershed Association scores a court victory

3. TVA ........................................ p. 5
   A. EIS process has started for new coal-ash storage at Bull Run

4. National news ................................. p. 5
   A. Congress fails to reauthorize LWCF; “Modernization” very damaging
   B. Congress continues attempts to kill the WOTUS rule
   C. Congress moving relentlessly to destroy environmental protections
   D. Must strengthen rule for protecting streams from mountaintop-removal
   E. Alaska and offshore: near-term halt in oil & gas drilling
   F. National Monument tally

5. Energy; climate change ...................... p. 7
   A. BREAKING NEWS: Senate just killed the Clean Power Plan
   B. Obama rejects Keystone XL Pipeline
   C. Methane, a major contributor to climate change, must be regulated
   D. When the biomass is forests, atmospheric carbon pollution can exceed pollution from coal burning
   E. Hurdles and cost factors for renewable energy (transmission infrastructure; capacity factor; carbon fees)
   F. EPA’s new rule will require dry handling of coal ash
   G. Climate-change capsules                   H. Presidential candidates and climate change

6. The Oak Ridge area ............................ p. 10
   A. New TWRA Conservation Officer for the ORR
   B. Manhattan Project NHP                   C. To improve energy efficiency of older homes

7. TCWP NEWS (Upcoming & recent activities; Thanks; In the news; ED column; Kroger reminder) . . . . p. 10

8. Calendar ...... p. 12

9. ACTION SUMMARY ...... p. 2
9. ACTION SUMMARY

<table>
<thead>
<tr>
<th>No.</th>
<th>Issue</th>
<th>Contact</th>
<th>&quot;Message!&quot; or Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>Revised oil &amp; gas regs for parks</td>
<td>National Park Service</td>
<td>“Please choose the more protective Alternative C!”</td>
</tr>
<tr>
<td>2A</td>
<td>Tennessee Wilderness Act</td>
<td>Reps. Roe</td>
<td>“Thank you for supporting the Tennessee Wilderness bill!”</td>
</tr>
<tr>
<td>4A</td>
<td>Land &amp; Water Conservation Fund</td>
<td>House Natural Res. Comm.</td>
<td>“Reauthorize LWCF without your damaging changes!”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Your members of Congress</td>
<td>“Omnibus Appropr. bill should reauthorize clean LWCF!”</td>
</tr>
<tr>
<td>4C</td>
<td>Congress vs. environment</td>
<td>Your Members of Congress</td>
<td>“Don’t permit anti-environment riders in Omnibus Appropr. bill!”</td>
</tr>
<tr>
<td>4D</td>
<td>Stream Protection Rule</td>
<td>Your Members of Congress</td>
<td>“Don’t prohibit funding for Stream Protection Rule!”</td>
</tr>
<tr>
<td>5C</td>
<td>Methane emissions rule</td>
<td>EPA Admin. McCarthy</td>
<td>“Thanks for rule. Now also limit existing methane sources”</td>
</tr>
<tr>
<td>7</td>
<td>TCWP actions</td>
<td>TCWP</td>
<td>Participate in activities. Volunteer.</td>
</tr>
</tbody>
</table>

United States Senate  U.S. House of Representatives  The White House  State Capitol
Senate Office Building  House Office Building  Washington, DC 20500  Nashville, TN 37243-9872
Washington, DC 20510  Washington, DC 20515  202-456-1111 (comments); 615-741-2001; Fax 615-532-9711
Dear Senator Doe  Dear Congressman Doe  Dear Mr. President  Dear Gov. Haslam
Sincerely yours,  Sincerely yours,  Respectfully yours,  Respectfully yours,

Ph: 202-224-3344; FAX: 202-228-0566  Ph: 202-224-4944; FAX: 202-228-3398  Phone: 202-225-3271
E-mail: http://corker.senate.gov/public/  E-mail: http://alexander.senate.gov/public/  FAX: 202-225-3494
800 Market St., Suite 121, Knoxville 37902  800 Market St., Suite 112, Knoxville 37902  https://fleischmann.house.gov/contact-me

To call any Repr. or Senator, dial Congressional switchboard, 202-224-3121. To find out about the status of bills, call 202-225-1772.
With mail to Congress still slow following the anthrax scare, consider faxing, phoning, and other modes of communication.

You can find contact information in our Political Guide. It’s on TCWP’s website (http://www.tcwp.org), as are some current action calls.
You can also choose to receive e-alerts by contacting Sandra Goss (see below).

WHAT IS TCWP?

TCWP (Tennessee Citizens for Wilderness Planning) is dedicated to achieving and perpetuating protection of natural lands and waters by means of public ownership, legislation, or cooperation of the private sector. While our first focus is on the Cumberland and Appalachian regions of Tennessee, our efforts may extend to the rest of the state and the nation. TCWP’s strength lies in researching information pertinent to an issue, informing and educating our membership and the public, interacting with groups having similar objectives, and working through the legislative, administrative, and judicial branches of government on the federal, state, and local levels.

TCWP: 130 Tabor Rd., Oak Ridge, TN 37830  
President: Jimmy Groton, 865-483-5799 (h)
Executive and Membership-Development Director: Sandra Goss, 865-583-3967. Sandra@sandragoss.com
Newsletter editor: Lee Russell, lianerussell@comcast.net
Editor's note. I'm baaack (after 2½ months in hospital and rehab, followed by recovery time at home). During my absence, TCWP did not fail to produce a NL. Thanks to the great organizing skills of our executive director, Sandra, and the knowledgeability and dedication of the many volunteers she recruited to do the writing of articles, formatting, and other jobs, NL323 was published and distributed right on schedule. I am forever grateful to them, and proud of TCWP!

Lee Russell

1. OBEDE and BIG SOUTH FORK

1A. NPS's revisions of oil & gas regs have major bearing on BSFNRRRA

Everyone who cares about the Big South Fork NRRA should want to take action on behalf of this upcoming opportunity. Currently 12 units of the National Park System contain 534 non-federal oil and gas operations. Of these, more than 300 are located in the BSFNRRRA (and 7 in the Obed WSR). In the summer of 2012, NPS published an oil & gas management plan for these units (NL305 ¶1B; NL306 ¶1B) under existing 9B regulations. The newly proposed rulemaking, which is for the entire National Park System, would improve these regulations so as to eliminate some bad existing loopholes and revise currently ineffective or inadequate provisions.

The following are key points of the rulemaking:

- Eliminate two provisions that exempt ~60% of the total operations from compliance with existing 9B regulations. This includes 241 operations that are currently exempt from 9B regulations due to “grandfathered” status. Also included would be operations currently non-regulated due to the “access exemption.”
- Revise the currently inadequate limit on the amount of financial assurance the NPS can require from operators, ensuring reclamation after the useful life of an operation has ended.
- Add a much-needed enforcement tool and update existing authority.

Three Alternatives are offered: (A) No Action; (B) Proposed Rule; (C) Modified Proposed Rule (which strengthens some features of B). Alternative B is NPS’s preferred alternative; but Alternative C has some important features; e.g., the NPS jurisdiction is expanded to encompass directional drilling from outside the park, a condition that pertains to the oil & gas operations located in the Obed WSR. Also, provisions would include operations located on non-federal inholdings within park boundaries.

To view the proposed rule and DEIS, visit http://parkplanning.nps.gov and http://regulations.gov, or contact Edward kassman@nps.gov (303-969-2146) to request a printed copy. Comments are due by December 21, 2015, and the final rule is anticipated in the summer of 2016.

WHAT YOU CAN DO: We urge you to submit comments, by December 21, supporting Alternative C. Comments can be submitted, (a) Online at http://parkplanning.nps.gov/DEIS9B for the DEIS, or at http://regulations.gov for the regulation; or (b) By mail to Edward Kassman, Geologic Resources Division, National Park Service, PO.Box 25287, Denver, CO 80225.

1B. Protecting Obed habitats from climbing damage

Much of the climbing in the Obed WSR occurs in two preserves, one donated to The Nature Conservancy by Lee and Bill Russell (near mouth of Clear Creek), the other donated by Fred Stone (above Lilly Bridge). Climbers are asked to follow rules to preserve the habitats. TNC is now developing a rare-species monitoring plan that will be used to better track impacts by visitors when climbing or hiking on the preserves.

1C. BSFNRRRA in list of ten that typify threats to parks

With the centennial for the National Park System coming up next year, NPCA (National Parks Conservation Association) has identified 10 national parks that typify the threats faced by parks from coast to coast. Among these is the Big South Fork NRRA. It takes its place in a list that also includes Grand Canyon, Grand Teton, Yellowstone, Yosemite, Glacier, and Arches.

1D. Obed wins another Keeper of the Light Award

[From NPS’s Obed & BSF e-Newsletter, 10/15]

This prestigious award is the highest honor bestowed by the National Park Service’s Southeast Regional Division of Education & Interpretation. Obed received the award for the “Climb with a Ranger” program. Since its inception the program has become one of the park’s most effective outreach tools. Through this free program nearly 1000 visitors annually have the chance to participate in an activity that they might otherwise never experience.

The previous Keeper of the Light Award was for the Obed WSR’s annual program that brings every sixth-grader in Morgan County to the park for an all-day, intensive introduction to the park’s resources and recreational opportunities (NL309 ¶3C; NL317 ¶2C; NL318 ¶3A).

1E. Paddler information

For Obed paddlers who don’t already know this: Check out river gauge information at www.nps.gov/obed/planyourvisit/river-gauge-readings.htm.
2. TENNESSEE NEWS

2A. Tennessee Wilderness Act (TWA), latest update

[Contributed by Sandra Goss]

The TWA was introduced in the Senate earlier this year by Senators Alexander and Corker. This is the bill’s fourth introduction, meaning the bill has failed to pass the three previous Congressional sessions.

The act designates six areas in the Cherokee National Forest as Wilderness, the most protective management designation by the National Forest Service. The designation was part of the CNF’s most recent Management Plan, and is approved by the USFS.

Proposed Wilderness on the Cherokee National Forest:

- Rep. Roe’s 1st Congressional District—Total acreage, 7,368 (all in northern portion of the CNF):
  - Sampson Mountain addition, 2,922 acres
  - Big Laurel Branch addition, 4,446 acres

- Rep. Fleischmann’s 3rd Congressional District—Total acreage, 12,200 (all in southern portion of the CNF):
  - Big Frog addition, 348 acres
  - Little Frog addition, 978 acres
  - Upper Bald R. proposed wilderness, 9,038 acres
  - Joyce Kilmer Slickrock addition, 1,836 acres

Cherokee National Forest Total, 19,568 acres

In addition to enjoying our two Senators’ support, the bill is supported by Congressman Roe. Two sections of the proposed new wilderness (38% of the total proposal) are in his district.

WHAT YOU CAN DO: Constituents of Rep. Roe should call or write him (see Political Guide in www.tcwp.org) with appreciation for his support of the bill.

2B. Leadership changes for two major Tennessee land-protection groups

TNC

Gina Hancock, who, for the past four years, has served as State Director for the Tennessee Chapter of The Nature Conservancy, will this month join TNC’S Global Lands Team as Conservation Strategies Director. She’ll still be working out of Nashville. To date, no successor has been named. Under Gina’s leadership, more than 14,000 acres were added to the thousands protected earlier (for a partial list, see NL 322 ¶2C). Advances were made in the fight against the lethal white-nose syndrome in bats. Important strategies were implemented for educating the public about the value of trees and for guarding Tennessee’s trees from threatening invasive organisms. One of the most active tree-protection efforts is the program to protect hemlocks against woolly adelgid infestation.

TPGF

In May, Kathleen Williams announced that she was stepping down as executive director of the Tennessee Parks and Greenways Foundation, and will assume the part-time role as senior advisor. She will still be actively engaged with leading TennGreen’s efforts to advocate at the state and federal levels for conservation funding and to advise senior management on new conservation opportunities.

Since Kathleen began leading TPGF in 1998, the organization has saved 61 amazing treasures across Tennessee, including Cummins Falls, Virgin Falls, Devilstep Hollow Cave, Mississippi River Chickasaw Bluffs, the head of Pogue Creek Canyon, and acreage in the corridor that links Fall Creek Falls State Park to the Bridgestone Firestone Wilderness (Scotts Gulf). Other projects are in progress (see NL 322 ¶2C).

A new executive director is being welcomed Nov. 20. He is Steve Law whose resume includes nearly 25 years in the conservation sector, including natural resource management, greenways planning and operations, strategic conservation planning, negotiating land acquisitions, and environmental education. He has a B.S. in Wildlife Management from the University of Maine at Orono. Much of his previous employment has been in North Carolina and Connecticut.

2C. Holston River pollution to be reduced

[Information from Tenn. Clean Water Network]

The Holston was one of two Tennessee Rivers that made it into American Rivers’ 2015 “Most Endangered Rivers” list (NL321 ¶3C). Threatened by the toxic explosive RDX from the Holston Army Ammunitions Plant, it ranked #3 on that list.

Based on an EPA advisory, the state had imposed a strict permit limit for RDX in 2007, but granted the facility five years to comply. Ever since the compliance deadline of May 2012, however, the RDX discharge has routinely exceeded this permit level.

TCWN has now succeeded in brokering a consent decree that prescribes a date certain of July 2020 for the facility to comply with the RDX permit limit. This is good news for thousands of East Tennesseans who depend on the Holston for drinking water, and for recreational users of the Holston River, including Cherokee Lake.

2D. Harpeth Watershed Association scores a court victory

The second Tennessee river to make it into American Rivers’ 2015 “Most Endangered Rivers” list because of pollution, was the Harpeth, ranking #9. Recently, a citizens’ group that is fighting this pollution scored a court victory.

[Contributed by Sandra Goss]

Earlier this month, a federal judge dismissed a lawsuit against Harpeth River Watershed Association (HRWA) filed by the City of Franklin. According to the Franklin Home Page, HRWA filed suit against the City of Franklin over its failure to follow property environmental laws and regulations over nitrogen levels, sewage overflow, and effluent water re-entering the Harpeth. The City of Franklin countersued HRWA on the settlement terms it
was asking for in the original lawsuit, calling it an "abuse of the legal process."

After a four-hour hearing in U.S. District Court for the Middle District of Tennessee, Judge Kevin Sharp dismissed the city's lawsuit against the advocacy group seeking attorney fees and other unspecified costs. No trial date has been set for HRWA's suit against the City of Franklin.

It is widely believed that the lawsuit filed by the City of Franklin was intended to intimidate HRWA and run up legal costs to the point of unaffordability. Congratulations, HRWA, on this legal victory!

3. TVA NEWS

3A. EIS process has started for new coal-ash storage

Following EPA's coal-ash regulations of December 2014, and in anticipation of a new federal ruling on toxic, liquid discharges from power plants into rivers and waterways (¶5E, this NL), TVA a while ago initiated the EIS process for coal-ash storage near Bull Run Fossil Plant. Bull Run is one of TVA's coal plants that will continue to operate in the future. Others are switching to oil or shutting down.

Hearings have been held on the scoping, and the scoping document is now available at http://www.tva.com/environment/reports/index.htm; printed copies can be requested by e-mailing aemasters@tva.gov. The scoping report identifies issues and alternatives to be considered in the EIS, a draft of which is expected to be released in the summer of 2016, with the final EIS planned for 2017. The EIS is one of the factors that will enter into the final decision on proceeding with the new storage area. Other factors are engineering and risk evaluations and financial considerations.

4. NATIONAL NEWS

4A. Congress fails to reauthorize LWCF. Proposed “modernization” very damaging.

The Land & Water Conservation Fund of 1965 (NL322 ¶4A; NL 321 ¶5A) was allowed to expire on its 50-year sunset date in September, despite the strong bipartisan support it enjoyed over the decades. There had been several proposals for the LWCF’s permanent reauthorization, including a recent bill, HR.1814/S.338, whose Senate sponsor was a Republican (Burr-NC), but which, despite frequent requests, was never even granted a hearing. A bipartisan group of 53 Senators requested attaching a temporary reauthorization to the Continuing Resolution, only to be blocked by the Republican Leadership.

[The following info is from an NPCA press release]

On Nov. 5, House Natural Resources Committee Chairman Bishop (R-UT) released the discussion draft of a bill to “reform” the LWCF, the PARC Act. Hearings are scheduled for Nov. 18. A summary of this bill may be viewed at http://naturalresources.house.gov/uploaded-files/parc_act_information_11_5_15.pdf

The many proposed provisions would be very damaging to the original purpose of the LWCF. Among the most damaging changes are the following:

- Severely limiting the percentage of LWCF going towards the federal program. [Recall that the federal component of the LWCF provides funding for additions to national parks, national wildlife refuges, national forests and other federal public lands.] This would prohibit the vast majority of proposed federal NPS projects proposed for FY16;
- Committing some of the funds to the maintenance (rather than acquisition) backlog, with a requirement for private matches;
- Peeling off funds to enhance offshore energy, as well as to fund other programs that should not be paid for with LWCF funds;
- Limiting federal acquisitions strictly to inholdings. Though the vast majority of acquisitions tend to be inholdings, the National Park Service currently enjoys the flexibility to fund edgeholdings within congressionally authorized boundaries wherein adjacent parcels have high resource values worth protecting.

We must work hard to get the LWCF reauthorized. The longer it remains “unauthorized,” the harder it’s going to be to get it back on the books.

WHAT YOU CAN DO: (1) Contact Rep. Rob Bishop, Chairman, House Natural Resources Committee, US House of Representatives, Washington, D.C., 20515, and urge him to reauthorize the LWCF with the very damaging changes that are currently proposed. (2) Urge your own Members of Congress (addresses, p.2), to support an omnibus appropriations bill that provides a clean reauthorization of LWCF. Every county in the nation has benefited from the fund.

4B. Congress continues attempts to kill to the WOTUS rule

The EPA’s Waters of the United States (WOTUS) rule (NL322 ¶4C), which finally took effect June 27, certainly makes a lot of sense. It should be obvious that water quality in perennial waters is directly influenced by water quality in intermittent and ephemeral waters that feed into them, and that these small waters must therefore be included in the protections of the Clean Water Act. The provisions of the WOTUS rule will safeguard drinking water for 117 million Americans.

The opposition, however, has been loud and persistent, clamoring against federal takeover of “every ditch.” Recently, for instance, “reining in EPA’s clean water regulations” was a bargaining chip in Republican negotiations
关于提高债务上限的问题。自从该规则生效以来，许多州和特别兴趣团体一直在向联邦法院提出诉讼，他们担心该规则的实施将对国家的宏观经济产生重大影响。

A Senate bill would have forced the Administration to withdraw the WOTUS rule. Though the vote was 57:41 in favor (indicating that a few Democrats voted with Republicans), the WOTUS opponents failed to get the 60 votes required to pass their bill. Less than 24 hours later, however, Senate Majority Leader Mitch McConnell pushed through an obscure, extreme legislative tactic called the Congressional Review Act (¶4C, below), to permanently block the EPA’s historic progress on clean water -- and it passed. Pres. Obama has vowed to veto this assault on clean water.

4C. Congress moving relentlessly to destroy environmental protections

It’s a never-ending battle to protect even small victories for environmental protections (see, e.g., the recent battle for the WOTUS rule, ¶4B, above). This is particularly true now, when Congress is pursuing several strategies to fight EPA rules (along with other issues).

One strategy is to attach more than 100 bad policy riders (amendments) to totally unrelated must-pass spending bills (a new spending bill must be passed by December 11 to keep the government open). For example, enemies of the Endangered Species Act have introduced over a dozen of these riders aimed at undermining species protections. Other riders would kill the EPA’s clean power plan (CPP) or the WOTUS rule.

There is also the possibility of a legislative maneuver called the Congressional Review Act (CRA). A CRA process gets fast-tracked, requiring only a simple 50-vote majority to pass in the Senate. If directed against an EPA rule, a 50-vote win also ensures that EPA can never again take up a “substantially similar” rule.

Just as this NL is going to press, a CRA vote to forever kill EPA’s climate change regulations for existing and new power plants has passed the Senate (evening of Nov. 17). See ¶5A. The House is also working on overturning EPA’s new moutaintop-mining rule (¶4D, below).

In addition to efforts to overturn EPA rules on climate change, WOTUS (¶4B, above), the Endangered Species Act (NL322 ¶4B), and the process of designating National Monuments (the Antiquities ACT (NL320 ¶7D), the Congress is crafting other attacks on the environment. One of these is HR.2406, the Sportsmen’s Heritage and Recreational Enhancement Act (SHARE), which recently passed out of committee. It would allow the construction of roads, dams, and other structures, as well as logging, chaining, or other damaging activities in Wilderness, if there is some even remote connection to hunting, fishing, shooting, or fish and wildlife management. If passed, this bill would be an unprecedented attack on the entire National Wilderness Preservation System.

WHAT YOU CAN DO:Tell your Congressman and senators (addresses on p.2) that Congress’s attacks on rules and laws that protect our environment do great harm to citizens of our country, if not to the well being of our planet. Urge them to keep the omnibus appropriations bill clean of environmentally-damaging policy riders. (Among the dangers of such a rider-loaded bill is a government shutdown.)

4D. Must strengthen rule for protecting streams from mountaintop-removal mining

One major damage from mountaintop removal coal mining, which has already flattened 500 mountains, erased 2.5 million acres of Appalachia's ancient forests, and devastated entire communities, is the dumping of mine wastes and overburden into headwater streams. More than 2000 miles of streams have already been obliterated, and many more polluted.

In mid-July, USDI’s Office of Surface Mining and Reclamation (OSM) proposed revisions (80 Fed. Reg. 44,436 , July 27, 2015) to the 1983 Stream Protection Rule. The comment deadline passed in September, oversight hearings were held a month after the deadline, and the approval process for the rule is expected to extend into 2016.

The proposed rule, (a) mandates that coal companies test and monitor the condition of streams affected by their activities before, during and after a mining operation; (b) requires that companies restore streams and other mined areas to “the uses they were capable of supporting before mining activities;” and (c) requires companies to put up increased money for bonds, or collateral, to pay for restoration once they finished mining. The proposed rule would, however, replace the 100-foot stream buffer zone language found in the 1983 regulations with a weaker requirement to minimize stream impacts.

An environmental consortium has written comments that support several components of the proposed Stream Protection Rule, (including improvements in baseline data collection, monitoring, and bonding requirements), but that call for significant strengthening provisions. Thus, they believe that OSM’s reasons in the proposal for not preserving and strengthening stream-channel protections are seriously flawed. At a minimum, the proposal must be strengthened with regard to protection of downstream water quality. OSM must clarify that the proposed regulations do not permit violations of water-quality standards under the Clean Water Act (CWA), and must ensure citizen enforcement of those requirements when state regulators fail.

Specifically, OSM’s proposed rule says that on-site acid mine drainage will not be considered a violation of SMCR (Surface Mine Control & Reclamation Act), Sec. 515 (b)(10), unless it generates “material damage” off-site under their proposed monitoring scheme. This would allow a
good bit of pollution before enforcement was triggered. The terms of SMCRRA, however, require OSM to minimize disturbance to the prevailing hydrologic balance by avoiding acid or toxic mine drainage (minimizing the contact of water and toxic-producing deposits, as argued by OSM, is not the standard).

This crucial conclusion derives an important case, the RITH Energy decision of the late 1980s, won by SOCM under the leadership of Don Barger. That decision, based on SMCRRA Sec. 515 (b)(10), requires the operator to AVOID (not minimize) acid or other toxic drainage . . . (a) at the mine site and off-site, (b) to water quality and quantity, (c) of surface and ground water, (d) during and after mining.

what you can do
As you take action against anti.

4E. Alaska and offshore:

near-term halt in oil & gas drilling
On October 16, the U.S. Department of the Interior cancelled the 2016 and 2017 lease sales for the Chukchi and Beaufort Seas (north of Alaska). Observers believe that this action, combined with Shell’s recent decision to call off its Arctic drilling plans for the foreseeable future, demonstrate that the Arctic is no place for drilling. This is not necessarily the end of the story; the Oct.16 announcement only covers lease sales for the next two years. The Administration will soon release its next five-year offshore drilling plan for 2017-2022, which could conceivably include the Beaufort and Chukchi Seas.

Inland, too, there has been significant protection against drilling, though it, too, is not permanent. In January, an Obama Administration Plan classified 12 million acres of the Arctic National Wildlife Refuge (ANWR), including the 1.4-million acre Coastal Plain (where oil companies have for decades been clamoring to drill), as a Wilderness Study Area. To be designated as a permanent component of the National Wilderness System requires Congressional action (which, in the present political climate, may be hard to come by). In the meantime, the new Wilderness Study designation means the area is managed as a wilderness, protecting it against numerous insults, including oil & gas drilling (NL320 ¶7B).

4F. National Monument tally
In 2015, under the authority of the Antiquities Act, six new national monuments have been designated, totaling more than >1,000,000 acres. That means that Pres. Obama has protected more than 2,000,000 acres of land during his presidency.

5A. Breaking News: Senate just killed the Clean Power Plan
Just as this NL is getting ready to go to the printer (evening of Nov. 17), a CRA vote (see ¶4C, above) to forever kill EPA’s climate change regulations for existing and new power plants has passed the Senate. The House will act shortly. President Obama is nearly certain to veto legislation overturning either one of these EPA regulations (the CPP).

Polls show that the American people overwhelmingly support strict carbon limits for power plants.

5B. Obama rejects Keystone XL Pipeline
On November 6, just four days after TransCanada Corp. had asked Pres. Obama to suspend the process of permit review for the Keystone XL Pipeline, the president did not suspend the process, but rejected the permit application outright (any cross-border project requires State Department review and a presidential permit). When the project was first proposed, it seemed like a slam-dunk. Now, after seven or eight years of widespread and massive environmental opposition, the decision to reject Keystone XL sets a powerful precedent for America’s clean-energy future -- which is especially critical as President Obama prepares for the international climate-change talks in Paris in December.

The Keystone Pipeline (NL320 ¶6) would have moved oil from one of the dirtiest sources on the planet – the Alberta tar sands – directly to Gulf Coast oil refineries (some owned by the Koch Brothers) and thence out of the country. Along its route, it could have destroyed an aquifer that provides drinking water to millions of Americans, and 30% of our irrigation water. The pipeline would not have provided oil for US consumption nor increased US oil production. And, after pipeline construction was completed, only 36 permanent jobs would be attributable to Keystone XL.

Obama had long promised to stop the Keystone XL if it would significantly worsen the dangerous carbon pollution that fuels climate change, and it has become abundantly clear that this would be the case due to the nature of the tar-sands-mining process, the “dirtiness” of the product, and methane leaks along the way. (In announcing his decision on Keystone XL, Pres. Obama said: “ultimately, if we're going to prevent large parts of this Earth from becoming not only inhospitable but uninhabitable in our lifetimes, we're going to have to keep some fossil fuels in the ground rather than burn them and release more dangerous pollution into the sky.”)

All major Republican presidential candidates have promised to approve Keystone. It was because TransCanada was hoping for a Republican administration after 2016 that it asked for the pause in permit review.

If TransCanada decides to fight this permit denial, its main options (according to The Hill, Nov.9) are filing an international challenge under the North American Free
Trade Agreement (NAFTA), seeking an act of Congress to override Obama, or waiting until a new president takes office in January 2017 to file for a new permit. The USA has, to date, won every challenge it has faced under NAFTA, making a TransCanada victory there a long shot.

5C. Methane, a major contributor to climate change, must be regulated

Pound for pound, methane is more than 80 times more potent than CO₂ in trapping heat in the atmosphere over the first 20 years after it is released. Significant slowing of global warming requires both a long-term strategy to reduce long-lived CO₂ emissions and near-term action to mitigate the shorter-lived methane emissions. Between ¼ and 1/3 of the man-made climate change that we are experiencing today is attributable to methane and other short-lived climate pollutants.

The booming oil & gas industry is the largest industrial source of methane in the United States, and is our country’s fastest growing source of GHG emissions. The US Greenhouse Gas Inventory estimates that the oil and gas industry (wells, compressors, and pipelines) leaks or releases almost 8 million metric tons of methane each year (about one-third of total U.S. methane emissions). Technologies to reduce methane pollution are available now and are cost-effective.

EPA has proposed commonsense regulations that can cut harmful methane pollution in half in just a few years. Measures that reduce methane will also cut emissions of other hazardous air pollutants like benzene. The methane regulations would thus achieve a major multi-pollutant benefit. As the oil and gas industry is preparing an army of lobbyists and lawyers to oppose the rule, claiming that reductions can be achieved by voluntary measures, it is very important for citizens to support the EPA rule, and to thank Administrator Gina McCarthy for proposing it. Curbing methane is a “win-win-win” that can save fuel (escaping – and thus lost -- natural gas is composed mainly of methane), reduce greenhouse gas emissions, improve air quality, and improve pipeline safety.

The proposed regulations apply to new and modified sources. While this is a good beginning, it is essential to have it followed up with regulations of existing sources under section 111(d) of the Clean Air Act. In 2018, 90% of methane will come from sources that were operational in 2011 (i.e., existing). Non-operational sources must also be considered; Pennsylvania alone has 300,000 to 500,000 abandoned oil and gas wells, some of which are leaking significant amounts of methane.

Reducing methane emissions is a critical near-term step toward implementation of the Climate Action Plan and of continued U.S. leadership on climate protection.

WHAT YOU CAN DO: Because the comment deadline (November 17) will have passed by the time the print copy of NL324 goes in the mail, we have sent an alert to our e-list and to members who have requested electronic copy of our Newsletter. It includes the following Action Call:

Thank Administrator McCarthy, and tell the EPA that you support a strong methane pollution standard. The proposed rule should be followed soon with regulation of existing sources.

You can e-mail at a-and-r-Docket@epa.gov. Refer to: Docket ID No. EPA–HQ–OAR–2010-0505.

5D. When the biomass is forests, atmospheric carbon pollution can exceed pollution from coal burning

On June 18, the Washington Post published a front-page exposé based on a study commissioned by SELC (Southern Environmental Law Center). The analysis showed that biomass is far worse for greenhouse gas emissions than coal when it comes from cutting down hardwood forests in eastern North Carolina and Virginia. Under European policies intended to reduce carbon emissions and fight climate change, this energy source currently comes from a pellet supplier for the UK power company Drax. The SELC-commissioned analysis showed that the carbon emissions from this forest-sourced biomass will produce 2 ½ times more carbon pollution than continuing to burn coal for 40 years, and more than three times the carbon pollution from coal over 100 years.

From The Washington Post article: “Soaring demand for this woody fuel has led to the construction of more than two dozen pellet factories in the Southeast in the past decade, along with special port facilities in Virginia and Georgia where mountains of pellets are loaded onto Europe-bound freighters. . . . Europe’s appetite for wood pellets could lead to more carbon pollution for decades to come, while also putting some of the East Coast’s most productive wildlife habitats at risk.”

5E. Hurdles and cost factors for renewable energy

Need for transmission infrastructure [Information from SACE]

As our supply of renewable energy grows, we face a problem: we lack the 21st century electric transmission infrastructure to deliver abundant sources of renewable energy, which are primarily located in remote areas, to consumers in our cities and towns. The Plains & Eastern Clean Line transmission project would deliver low-cost wind energy from the wind-rich Oklahoma Panhandle region to utilities and customers in Arkansas, Tennessee, and other markets in the Mid-South and Southeast. It would be privately financed and not dependent on federal subsidies.

The capacity factor [Information from Bloomberg News, Oct. 6]

The capacity factor (CF) is the percentage of a power plant's maximum potential that's actually achieved over time. The CF has been relatively low for renewables, because the sun does not always shine and the wind does not always blow (except in some locations). Fossil-fuel plants, on the other hand, can command very high and predictable capacity factors.
Recent rapid growth of renewables, which had made up only a small fraction of U.S. electricity (5% in 2014), is effectively lowering the capacity factor for fossil fuels. That’s because once a solar or wind project is built, the marginal cost of the electricity it produces is pretty much zero, while coal and gas plants require more fuel for every new watt produced. As more renewables are installed, coal and natural gas plants are used less, the cost of using them to generate electricity goes up (i.e., their capacity factor becomes lower). As the cost of coal and gas power rises, more renewables will be installed.

Wind power, including U.S. subsidies, became the cheapest electricity in the U.S. for the first time last year, according to BNEF. Solar power is a bit further behind, but the costs are dropping rapidly, especially those associated with financing a new project.

**Carbon-pollution fees**

[Information from The Hill]

Six major European oil companies are asking the United Nations to help impose carbon dioxide emission pricing in all countries (taxes on carbon emissions, cap-and-trade systems, or other policies). They ask for carbon pricing systems to be implemented in such a way that the systems could eventually be integrated internationally. While it could make oil production more expensive, carbon pricing could also encourage the production and use of natural gas, another major product for the oil companies.

Carbon pricing, the companies wrote, would encourage the most efficient ways of reducing emissions widely. In addition to reduction in demand for the most carbon-intensive fossil fuels, this would lead to “greater energy efficiency, the use of natural gas in place of coal, increased investment in carbon capture and storage, renewable energy, smart buildings and grids, off-grid access to energy, cleaner cars and new mobility business models and behaviors.”

**5F. EPA’s new rule for toxic waste from Power Plants will require dry handling of coal ash**

[Information from SACE, 10-20-15]

On September 30, EPA released the long-awaited Steam Electric Power Generating Effluent Guidelines (ELG rule, www2.epa.gov/eg/steam-electric-power-generating-effluent-guidelines), the first-ever national pollution limits to control toxic, liquid discharges from power plants into rivers and waterways. This follows EPA’s Coal-Ash Rule of December 2014 that was finally published six years after the Kingston coal-ash disaster of December 2008.

Every day, year after year, power plants across the country dump 5.5 billion pounds of contaminated wastewater directly into US rivers, lakes, and bays — that’s more toxic waste than the next nine most polluting industries combined.

One of the primary pollutants is wastewater from coal ash — the toxic byproduct from burning coal that fuels power plants. Coal ash is often stored wet in huge, unlined impoundments (sometimes referred to as “ponds” or “pits”) next to our rivers and waterways. It contains arsenic, mercury, and lead and poses serious risks to human health and the health of the environment. (See below for EPA’s coal-ash rule of December 2014).

The good news is that the new ELG rule will, for the first time, require dry handling of most coal ash, so it’s no longer added to these pits. While utilities will have years to meet these new requirements, the ultimate result will be a huge reduction in toxic pollution coming from power plants.

EPA’s Coal Ash Rule of Dec. 2014 (NL319 ¶5B), which requires groundwater monitoring and sets minimum federal standards for coal ash, has as its major weakness the failure to classify the toxic substance as “hazardous” under RCRA. This means that states are not required to implement the rule and the federal government cannot enforce the rule — essentially leaving enforcement to the utilities (which have to be sued when standards are violated). Also, the rule allows for the continued storage of coal ash in unlined ponds, with no requirement to close inactive impoundments. The recently proposed ELG now fixes this Coal Ash Rule weakness by regulating the toxic leachate from these ponds. This will bring about dry handling of most coal ash.

**5G. Climate-change capsules**

- “Carbon dioxide levels averaged 397.7 ppm in 2014 but briefly breached the 400 ppm barrier in the northern hemisphere in early 2014, and again globally in early 2015 ...” [said World Meteorological Organization Secretary-General Michel Jarraud]

- “Climate change could drive over 100 million more people into poverty by 2030” [says The World Bank].

- Cumulative country carbon emissions in tons of CO₂ from 1850-2012, divided by current population [Source: Friends of the Earth, 11/11/15]:
  - US, 1149
  - Germany, 1026
  - China, 107
  - India, 30
  - The US is the country that has racked up the highest carbon debt.

- In September, a group of House Republicans, led by New York Representative Chris Gibson, broke with their leadership and introduced a resolution acknowledging the reality of climate change and calling for action to address it. . . . Four Senate Republicans recently formed a working group to address climate and broaden the dialogue.

**5H. Presidential candidates and climate change**

Among Republican candidates, Lindsey Graham gets a lot of credit for his views on climate change, but his record on the issue has been mixed and at times contradictory. Former New York Gov. George Pataki is the only
other Republican candidate who has been proactively engaged on climate. Jeb Bush wooed the coal industry by speaking at a forum that includes top officers of some of the largest coal firms in the eastern United States. Some of the candidates don’t believe man-made climate change is occurring.

All three Democratic candidates have expressed great concerns over run-away climate change, and have proposed possible measures to address the danger.

6. The OAK RIDGE AREA

6A. New TWRA Conservation Officer for the Oak Ridge Reservation

Following the retirement of Jim Evans (NL322 ¶6D), TWRA named Aubrey Deck as Conservation Officer for the Oak Ridge Reservation. Deck, 36, has been with TWRA for seven years. Before that, he was a private land specialist and understands our issues. Jim Evans has been very helpful during the transition.

6B. Manhattan Project NHP news

November 12 was the official beginning of the Manhattan Project National Historical Park, a park with sites in three locations, one of which is Oak Ridge. This is the 409th unit of the National Park System, established just in time for the NPS’s 100th Anniversary in 2016.

Manager, Niki Nicholas, Superintendent of the BSFNARRA & Obed Wild & Scenic River, has been designated as the current manager for the Oak Ridge unit of the Manhattan Project NHP. She takes on these duties in addition to her usual ones. The park’s contact/visitor center, located in the American Museum of Science and Energy, will be manned by a ranger on Saturdays, initially, increasing eventually to 7 days/week.

Cultural Landscapes. EQAB has already endorsed, and the O.R. Recreation and Parks Advisory Board is being urged to endorse, the idea that cultural landscapes (especially the Three-Bends area) be included in the list of Manhattan Project National Historic Park sites. Doug Colclasure presented this proposal to the Board in August and was supported by Dan Robbins. The MPNHP enabling legislation, in addition to identifying four elements for the Oak Ridge site, also makes possible "other sites in Oak Ridge, Tennessee, that are not depicted on the map [of the four elements]."

6C. Oak Ridge gets grant to improve energy efficiency

Oak Ridge was awarded a $2.9 million grant from the Tennessee Valley Authority to improve the energy efficiency of Manhattan Project-era homes. It is anticipated that the upgraded homes will experience a 25% reduction in electric energy usage. The grant is part of the TVA “Extreme Energy Makeover” project.

7. TCWP NEWS

7A. Upcoming activities

[Compiled by Carol Grametbauer]

[NOTE: Times listed for all events are Eastern Time.]

TCWP Holiday Party – Thursday, December 3
This annual event, which has become one of the most popular of the year, will again be held at the home of long-time TCWP members Jenny Freeman and Bill Allen, 371 East Drive, Oak Ridge.

All members and friends are welcome! The hours are 7 – 9:30 p.m. Please bring an hors d’oeuvre or dessert to share; beverages will be provided.

Whites Creek Trail workday – Saturday, January 16
TCWP will sponsor a day of trail maintenance work at Whites Creek Small Wild Area in Rhea County at 10 a.m. as part of our ongoing stewardship activities for this TVA Small Wild Area trail. The trail loops onto land that TCWP purchased from Bowater several years ago, thanks to the generous support of our members.

Participants should wear sturdy shoes or boots and bring work gloves, loppers, and small bow saws or folding saws. Some hand tools will be available at the event. Please be sure to bring clothing appropriate for weather conditions, water, snacks, and/or a lunch.

Participants can meet for carpooling in Oak Ridge at the Gold’s Gym/Books-A-Million parking lot in Oak Ridge (at the end close to S. Illinois Avenue, near Salsarita’s). We will leave Oak Ridge at 9 a.m., or volunteers can join the crew at the trailhead at 10 a.m. We plan to spend three or four hours at the site, but volunteers may come and go as they wish. (NOTE: If the weather is uncooperative—excessive rain, or snow and ice—we will reschedule for the following Saturday.)

For additional information, contact Jimmy Groton at 865-805-9908 or at groton87@comcast.net.

TVA Natural Resources Information Program – Thursday, February 11
Save the date! Rebecca Tolene, TVA’s Vice President of Natural Resources, will be the featured speaker at a TCWP information program at 7 p.m. on Thursday, February 11 (meeting location to be determined). See the January newsletter for additional information.

Additional information on all TCWP activities may be obtained from TCWP Executive Director Sandra K. Goss at Sandra@sandrakgoss.com or at 865-583-3967.
7B. Recent events  
[Compiled by Carol Grametbauer]

National Public Lands Day cleanup at Worthington Cemetery – Saturday, September 26

(Contributed by Jimmy Groton)
More than 20 volunteers attended this year’s National Public Lands Day (NPLD) event on Saturday, September 26. NPLD is an annual event that focuses on both user enjoyment and celebrating volunteer conservation efforts on public lands. As in years past, TCWP and TVA partnered for a day of observation of and education about the unique native plants, as well as the invasive exotic plants, that occur in TVA’s Worthington Cemetery Ecological Study Area on Melton Hill Reservoir in Oak Ridge. In the spirit of NPLD, we also did some minor hand-tool work to remove the exotic invasive plants and restore the native cedar barren.

This year the Sons of the Revolution also helped with the NPLD event. We began the activities with an interpretive walk, and a talk on birding by TVA retiree (and TCWP Program Committee member) Wes James and a discussion of the plants of the ESA by TCWP Board member Larry Pounds. After that we continued our work to restore the native cedar barren and to remove exotic invasive plants and trash. At the completion of our work, TCWP provided a pizza lunch to volunteers.

Hike at Norris Reservoir – Saturday, October 24

(Contributed by Joe Feeman)
Our hike in the Norris Municipal Watershed and along Norris Reservoir was well attended, with 18 hikers. The skies were overcast, but the temperatures were perfect and the leaves were beginning to show their fall colors. As we followed along Norris Lake on the Lakeview Trail (Norris Dam State Park) we saw glimpses of the clear blue waters below. It was a perfect fall day for hiking through the woods.

TCWP Annual Meeting – Saturday, October 31

Nearly 40 members and guests attended our 2015 annual meeting, held at the Knoxville Outdoor Adventure Center on Volunteer Landing. Our guest speaker was Carol Evans, executive director of the Legacy Parks Foundation, who discussed Knoxville’s Urban Wilderness, along with a brief history of LPF and the organization’s strategy for doing its work. Legacy Parks is celebrating its 10th anniversary this year, as we prepare to celebrate our 50th in 2016.

During the business meeting, which included election of officers and board members for 2016 and approval of changes to the TCWP Bylaws, President Jimmy Groton presented a summary of 2015’s high points and challenges. At the conclusion of his remarks, he presented Mary Lynn Dobson, who recently left the board following many years of service, with a handmade vase as a token of the board’s appreciation.

After a delicious box lunch from Tomatohead, part of the group enjoyed a hike led by Chris Hamilton on the Lost Chromosome and Chain Ring trails in South Knoxville, while others toured Civil War sites Fort Dickerson and Fort Higley, led by Dot Kelly and Joan Markel, respectively. Both are long-standing members of the Knox Civil War Roundtable. Though the morning was overcast, skies began to clear as the groups left the Adventure Center for the two outings, and we had a beautiful October afternoon.

Fall Cedar Barren Cleanup – Saturday, November 7

(Contributed by Jimmy Groton)
Twenty-three volunteers, including Oak Ridge High School Environmental Science instructor Deni Sobek and thirteen of her students, participated in invasive-plant removal during our third and final Cedar Barren cleanup of the year. Located next to Jefferson Middle School in Oak Ridge, the Barren is a joint project of the City of Oak Ridge, State Natural Areas Division, and TCWP. The area is one of just a few cedar barrens in East Tennessee, and is subject to invasion by a number of invasive species that threaten the system’s prairie grasses.

During the course of the morning, we also met with Nancy Adgent, a writer for The Tennessee Conservationist, which is planning an article about TCWP and the stewardship work we do at the Oak Ridge Barrens State Natural Area and Worthington Cemetery. We also arranged for Ann Worthington to be there to meet Nancy, since Nancy is interested in old cemeteries. After we showed Nancy around the Cedar Barren, Ann gave her a tour of Worthington Cemetery.

7C. Thanks, and a tip of the hat to …

[From Sandra Goss]

-- Warren Webb for writing TCWP’s comments for the proposed DOE property transfer for an airport.

-- Tim Bigelow, Joe Feeman, Carol Grametbauer, Gary Grametbauer, Jimmy Groton, Cindy Kendrick, Donna Kridelbaugh, Natalie Landry, Angela Sutton, and Warren Webb for contributing to TCWP Newsletter 323, coordinated by Sandra while Lee was in the hospital.


-- Francis Perey for serving as TCWP’s webmaster.

-- Natalie Landry, Mary Ann Reeves, and Oak Ridge League of Women Voters leadership for their effective work on the Community School held in September.

-- Jimmy Groton, Ann Worthington, and our TVA friends for their help with the Worthington Cemetery Clean-up on National Public Lands Day (September 26).
-- Tim Bigelow, Cindy Kendrick, and Keith Kline for their attendance at the Community Shares Campaign Kickoff event on September 29.

-- Joe Feeman for leading the Norris Watershed Hike on October 24.

-- Chuck Estes (Chair), Bill Allen, and Kirk Eddlemon, for their service as the 2015 TCWP Nominating Committee.

-- Marion Burger, Cyd Hamilton, and Joe Horton for their help with set-up and break-down for the 49th TCWP Annual Meeting on October 31.

-- Carol Evans for her interesting, well-delivered presentation on the Legacy Parks Foundation at the Annual Meeting, and Chris Hamilton, Dot Kelly, and Joan Markel for excellent leadership and interpretation for our afternoon outings.

-- Tim Bigelow (Cedar Barren Steward), Jimmy Groton, and Larry Pounds for their leadership at the November 7 Cedar Barren Clean-up.

-- Carol Grametbauer for her excellent service as TCWP Secretary and Program Committee Chair.

-- Tim Bigelow for his exacting care of TCWP’s finances as our Treasurer.

7D. Friends and Members in the news

[Compiled by Sandra Goss]

-- Mick Wiest was pictured and quoted in a news article about the Oak Ridge Heritage and Preservation Association in the September 22 News Sentinel. He also wrote a letter of thanks to the editor of The Oak Ridger on September 9.

-- Jeff Mellor wrote a letter to the editor of the News Sentinel on September 30 about gun possession.

-- Joe Feeman authored an article about preparing to travel to the Grand Canyon in the October 28 Norris Bulletin.

-- Marty Adler-Jasny was pictured in the November 4 News Sentinel at an Oak Ridge League of Women Voters meeting.

-- Patrice Cole wrote a fine article about Lee Russell and Tennessee Citizens for Wilderness Planning in the September 10 Knoxville Mercury.

7E. Executive Director’s Column

[By Sandra Goss]

TCWP had a wonderful Annual Meeting on Hallowe’en. Carol Evans, Executive Director of the Legacy Parks Foundation, was our dynamic speaker; an afternoon hike on a couple of South Knoxville trails was led by trail guide co-author (and long-time TCWP member) Chris Hamilton. Civil War mavens Dot Kelly and Joan Markel guided outings to Forts Dickerson and Higley in South Knoxville.

South Knoxville is enjoying a surge of development interest. That development is more than buildings; it is interconnected trails, parks, and river access points that attract recreating visitors. It’s a great example of outdoor recreation development as a key part of economic rejuvenation.

Carol Evans shared data about green spaces and home values and other pertinent information about the benefits of parks and green spaces. A summary of surprising facts can be found on the TCWP home page at www.tcwp.org.

Earlier this month, there was much celebrating to welcome a new park to Oak Ridge. The Manhattan Project National Historic Park is America’s newest national park unit, and the only one with three sites in three different states. Oak Ridge organizations and businesses are working to harness the attraction of the park to benefit the city.

Our area is rich with natural beauty and resources. TCWP works to take care of Tennessee’s wild places through hands-on projects such as trail maintenance and invasive exotic pest plant removal, through science-based comments on environmental issues, and public education with our informative newsletter, e-lets, quarterly programs, and website. With your help, we protect the Obed Wild and Scenic River and other incomparable wild lands and waters. THANK YOU!!

In a few weeks, TCWP will embark on its 50th year. In addition to our regular work sessions, the Program Committee plans some special events in celebration of this milestone. Join us for the Whites Creek workday, the Alley Ford Cumberland Trail workday, the Cedar Barren cleanup, and Obed River cleanup from rafts, a presentation by TVA’s Vice President of Natural Resources, and a host of other events.

Hope to see you at our enjoyable Holiday Party on December 3 at the home of Jenny Freeman and Bill Allen! Looking forward,

Sandra

7F. Kroger card reminder

If you sign up for a Kroger card and designate TCWP (ask Sandra for help, 865-583-3967), TCWP gets a reward for every purchase you make. This WILL NOT affect your grocery cost, your individual rewards, nor your fuel points for discounts on gasoline.

8. CALENDAR; RESOURCES

** CALENDAR (events and deadlines)**

(For more information, check the referenced NL item; or contact Sandra Goss, 865-583-3967, or Sandra@sandrakgoss.com)

- Dec. 3, TCWP Holiday Party (see ¶7A, this NL).
- Dec. 21, Comment deadline for NPS’s oil & gas revisions (see ¶1A, this NL).
- Jan. 17, Whites Creek Trail workday (see ¶7A, this NL).
- Feb. 11, Information Program on TVA’s Natural Resources Program (see ¶7A, this NL).
• RESOURCES

• A good article supporting the Endangered Species Act may be viewed at http://www.scientificamerican.com/article/protect-the-endangered-species-act-editorial/?print=true.

• The Little River Blueway Map has been published by the Little River Watershed Association. It covers the river from the Great Smoky Mountains National Park boundary to the Little River’s confluence with the Tennessee River. The free map is available at a number of locations in Blount County. In Knoxville, the map is available from Knoxville Chamber Partnership, Uncle Lem’s, REI, River Sports, and Outdoor Knoxville.

• Michael Frome recently (June 30) released his latest book, Rediscovering National Parks in the Spirit of John Muir. In it he retraces the course his life has taken as both national park advocate and watchdog, and urges us to follow his lead. (Amazon Price, $24.95). Also good reading: A Life Of Conservation: Michael Frome And The National Parks (www.nationalparkstraveler.com/2015/10/life-conservation-michael-frome-and-national-parks)

• The U.S. Climate Resilience Toolkit (http://toolkit.climate.gov/content/about-climate-resilience-toolkit) was developed by The National Oceanic and Atmospheric Administration (NOAA) and other federal agencies as part of the Obama Administration's Climate Data Initiative. The Toolkit provides scientific tools, information, and expertise to help people manage their climate-related risks and opportunities, and improve their resilience to extreme events.
Board of Directors
Jimmy Groton .......... President
Mark Bevelhimer ........V. Pres.
Carol Grametbauer ..... Secretary
Tim Bigelow .................. Treasurer
Susan Donnelly .......... Director
Jamie Herold...............Director
Larry Pounds.............. Director
Liane (Lee) Russell ...... Director
Michele Thornton........ Director
Hannah Tippett ...........Director
Warren Webb............... Director
Sandra Goss ....Executive Director

Coming Events

Thurs., Dec. 3 TCWP Holiday Party
Sat., Jan. 16 Whites Creek Workday
Thurs., Feb. 11 TVA Natural Resources Informational Program