

ENVIRONMENTAL QUALITY ADVISORY BOARD

May 7, 2015

7:00 PM

Regular Meeting

Municipal Building Training Room

A. Call to Order

1. Introduction of EQAB Members and recognition and visitors
2. Approval of the agenda

B. Status update on City Stormwater Management Program, Stephanie Carlson (Public Works Dept.)

C. Approval of minutes from the April 2, 2015 Regular Meeting

D. High School Representatives Report

E. Unfinished Business

1. Recommendation on inclusion of Three Bends Area in Manhattan Project National Historical Park planning
2. Climate Action Plan: Info on traffic synchronization study and plans for raw water intake pump replacement project
3. Climate Action Plan: DOE request for information, Cities Leading through Energy Analysis and Planning (Cities-LEAP)

F. Reports and Other Communications

1. KACB
2. DOE, SSAB, ORRCA: review of recent activities

G. New Business

1. Proposed May 21st EQAB Work Session: DOE remediation/cleanup projects

H. Adjournment

KACB = Keep Anderson County Beautiful

DOE = U.S Department of Energy

SSAB = Oak Ridge Site Specific Advisory Board (DOE)

ORRCA = Oak Ridge Reservation Communities Alliance

ENVIRONMENTAL QUALITY ADVISORY BOARD

Regular Meeting Minutes
April 2, 2015

A. Call to Order: The regular meeting of the Environmental Quality Advisory Board (EQAB) was held at the Municipal Training Room. The meeting convened at 7 p.m. with Steve Kenworthy, Chairman, presiding.

Members in Attendance: Bruce Applegate (Staff Liaison), Steve Kenworthy, Gray Dean, Rhonda Bogard, Marisol Bonnet, Joe Wood, Robert Kennedy, Paige Russell, Pat Imperato

Members not in Attendance: Donna Kriedelbaugh, Aditya Chourney, and Emma Milloway

Others in Attendance: Ellen Smith (City Council) and Marion Burger (LWV)

Approval of Agenda: A motion to approve the agenda by Robert Kennedy; seconded by Gray Dean; motion passed.

Approval of Minutes: A motion to approve the minutes from the February 5th meeting by Robert Kennedy; seconded by Dean Gray; motion passed. There were no minutes from the March 5th EQAB meeting or the March 19th Work Session due to a lack of a quorum.

B. High School Representatives Report: There was no report since the students were not present.

C. Unfinished Business:

1. Steve Kenworthy reported on EQAB work meeting with Mark Watson on March 19, 2015.
 - No quorum present. Members present included Steve Kenworthy, Pat Imperato, Robert Kennedy, and Marisol Bonnet. Bruce Applegate was present as well.
 - Purpose of meeting was to have Mr. Watson list the type of work he wants to see EQAB involved in.
 - Re: Filling EQAB vacancies: City Manager recommends Council appointments to Board vacancies on a continuous basis. Council had to vote on this. City Manager would like a pool of residents to select from.
 - Climate Action Plan: The City has not renewed with ICLEI-USA (Local Governments for Sustainability) to use their greenhouse emissions model. Bruce Applegate will check what model Chattanooga is currently using and report to EQAB. Knoxville is using the ICLEI model. EQAB will make a recommendation to Mr. Watson on subscribing to a model to update the CAP.
 - Climate Action Plan: City needs to replace a major pump and substation at Melton Lake. Mr. Watson would like input from EQAB on cost benefit analysis and ROI analysis. EQAB members asked that Public Works provide more information. EQAB needs ongoing collection of data from City staff to be used to update the CAP. Mr. Watson asked that we specify what data needs to be collected and in what format. Bruce Applegate will look at data from Athanasia Senecal's files. Robert Kennedy volunteered to help define the format of the data needed for future CAP updates. Mr. Watson discussed study to

synchronize traffic signals on Oak Ridge Turnpike; EQAB could help to estimate reduction in greenhouse gases.

- Mr. Watson thinks a traffic circle at Melton Lake Road and Emory Valley Road would be helpful.
- Re: Tree Board Role: EQAB is waiting for results from the UT inventory of trees in parks and along right of way and graduate student recommendations in order to develop a tree plan for the City.
- Mr. Watson said he was interested in having EQAB assist the City in commenting on the new waste disposal facility proposed by DOE.
- Mr. Watson discussed the tour of members of the Manhattan Project National Historical Park team throughout the City. There are many possible options of how to do this in conjunction with the other 2 sites. Members however noted the enthusiastic support of community as a whole as a major plus.
- Discussion of the City's Stormwater Program: EQAB will ask Pat Fallon for a presentation at the May meeting.
- Mr. Watson said he was told by DOE that the City could operate the Clark Center Park for about \$200,000 annually. DOE could provide this annual funding for a few years. Any operational savings could be used for other infrastructure costs.
- Steve Kenworthy said that EQAB was interested in giving Environmental Quality Awards annually and will be developing award criteria. Mr. Watson was interested.

2. Manhattan Project National Historical Park Planning:

Ms. Smith gave an overview of the NPS-DOE project team that visited Oak Ridge in March. She noted that part of their work scope for the 2015 calendar year is to develop a general interpretive plan for the new National Park.

D. Reports and Other Communications

1. KACB: Pat Imperato reported that Earth Day Festival will be on April 26th at Bissell Park from 11 a.m. till 4 p.m. She asked that EQAB members help staff the specialty recycling collection program. Pat will send out a notice to members to sign up.

On March 14, 2015 Pat Imperato, Donna Kriedelbaugh, and Paige Russell helped (along with ORHS students) to plant 400 trees at Grove Park in one hour as part of the 50,000 Tree Project in TN. On March 21, 2015, Pat Imperato and other members of the community participated in the Melton Lake Shoreline Clean Up in Oak Ridge organized by TVA. TVA reps claimed 60 tons of material was cleaned up.

2. DOE, SSAB, ORRCA: Steve asked if any EQAB members wish to make recommendations, let him know.

E. New Business:

1. City will be making comments on the draft TVA Integrated Resource Plan (IRP). Steve will contact Amy Fitzgerald to see how far they have progressed. City is interested in supporting small nuclear reactors. Jo Wood agreed to examine the EIS for the IRP.

F. Adjournment: A motion to adjourn the meeting by Robert Kennedy; seconded by Gray Dean. Meeting adjourned at 8:30 p.m.

Respectfully Submitted,
Pat Imperato, Secretary

ICLEI = International Council for Local Environmental Initiatives
KACB = Keep Anderson County Beautiful
DOE = U.S Department of Energy
SSAB = Oak Ridge Site Specific Advisory Board (DOE)
ORRCA = Oak Ridge Reservation Communities Alliance
TVA = Tennessee Valley Authority

May 7, 2015 Draft Three Bends Letter to City Manager/Council

To: Members of the City Council and the City Manager

Re: Inclusion of Three Bends area into the Manhattan Project Historical National Park

The Three Bends Scenic and Wildlife Management Area of the Oak Ridge Reservation contains valuable natural and cultural resources that should be preserved as part of the Manhattan Project National Historical Park (MP-NHP). The Environmental Quality Advisory Board (EQAB) strongly recommends to City Council and City staff that the historical and ecological significance of these resources should be highlighted in the interpretive plan developed for the new MP-NHP. Inclusion of the Three Bends Area will broaden the appeal of the Park, enhance visitors' experience of Oak Ridge, and preserve natural and historical features that are an important part of the Manhattan Project story.

The Three Bends Area occupies some 3,000 acres from Solway Bend to Gallaher Bend along the Clinch River, bracketing the popular 80-acre Clark Center Park. The need for preservation of this unique rural landscape was recognized in 1999 when the Three Bends Scenic and Wildlife Management Area was designated by the Secretary of Energy. The restored Freel's cabin (ca. 1820) provides a glimpse of the early settlement along the Clinch River. The Three Bends Area also contains University of Tennessee agricultural research buildings where the effect of radiation on animals from the Trinity test site in New Mexico was studied. These features capture the cultural landscape of the people and activities in this region from early settlement to post-War years, and will closely support the mission and purpose of the MPHNP.

The Three Bends Area is currently managed by the Tennessee Wildlife Resources Agency and public access is limited. We feel that National Park Service (NPS) management of this area would result in a positive return for the community by enhancing the MP-HNP and as a complement to Oak Ridge's unparalleled system of greenbelts and greenways. Continued preservation of these natural resources will benefit the City directly through improved air and water quality, and will help protect areas of old growth forest and rare or endangered plants and animals.

National Park Service management of the Three Bends Area together with the prospect of City management of the Clark Center Park would provide a broad array of recreational activities in conjunction with the historical and cultural features of the MP-HNP. EQAB believes that the Three Bends Area presents an outstanding opportunity to further establish our City's commitment to historical preservation and environmental protection and to enhance public understanding of the community and our global contributions. Further, this initiative will attract visitors and new residents to Oak Ridge and help contribute to a sustainable green economy for the community.

May 7, 2015 – DRAFT Revision Joe Wood

To: Oak Ridge City Council and City Manager Mark Watson

Re: Inclusion of Three Bends area into the Manhattan Project Historical National Park

The Three Bends Scenic and Wildlife Management Area (hereafter referred to as the Three Bends Area or the Area) of the Oak Ridge Reservation contains valuable natural and cultural resources that should be preserved as part of the Manhattan Project National Historical Park (MP-NHP). The Area, currently managed by the Tennessee Wildlife Resources Agency (TWRA) which limits public access, encompasses approximately 3,000 acres surrounding the popular 80-acre Clark Center Park from Solway Bend to Gallaher Bend along the Clinch River. In 1999 the Three Bends Area was designated by the Secretary of Energy in recognition of the need to preserve the area as a unique rural landscape. The restored Freel's cabin (ca. 1820), which is also located within the designated area, also provides an example of early settlements along the Clinch River.

In addition, the Three Bends Area contains University of Tennessee agricultural research buildings where the acute and chronic effects of radiation exposure to animals from the Trinity test site in New Mexico was studied (which indirectly links the area to the proposed Los Alamos component of the MP-NHP). These features capture both the cultural landscape of the early settlement in the area, it also provides a glimpse of post-War activities which closely support the mission and purpose of the MP-HNP.

The Environmental Quality Advisor Board (EQAB) believes that inclusion of the Three Bends Area in the MP-HNP would:

1. Broaden the appeal of the Park and enhance the visitor experience by including natural areas as well as a glimpse of rural life in the area before the project,
2. Enhance the MP-HNP and provide a potential link to Oak Ridge's unparalleled system of greenbelts and greenways.
3. Benefit the City of Oak Ridge through improved air and water quality resulting from the continued protection and preservation of old growth forest and rare or endangered plants and animals.
4. Provide a broad array of recreational activities through the National Park Service (NPS) management of the Area together in conjunction with the City's management of the Clark Center Park; and
5. Further establish our City's commitment to historical preservation and environmental protection within the community.

EQAB therefore requests that the Oak Ridge City Council formally recommend that the National Park Service (NPS) include the Area in the designated footprint of the MP-NHP and strive to highlight the historical and ecological significance of the Area as the park is developed.

Commented [WJ1]: Are we certain that this is where the animals that were studied came from? It is my understanding that they were exposed to radiation (both externally and internally) in Oak Ridge.

Commented [WJ2]: How would this improve air and water quality over it's current baseline? I think a more appropriate wording would be along the lines of continued protection or something similar.

May 7, 2015 – DRAFT (Rev. 1)

To: Oak Ridge City Council and City Manager Mark Watson

Re: Inclusion of Three Bends Area in the Manhattan Project National Historical Park

The Three Bends Scenic and Wildlife Management Area (hereafter referred to as the Three Bends Area or the Area) of the Oak Ridge Reservation contains valuable natural and cultural resources that should be preserved as part of the Manhattan Project National Historical Park (MP-NHP). The Area, currently managed by the Tennessee Wildlife Resources Agency (TWRA) which limits public access, encompasses approximately 3,000 acres surrounding the popular 80-acre Clark Center Park from Solway Bend to Gallaher Bend along the Clinch River. In 1999 the Secretary of Energy in partnership with the State of Tennessee designated the Area as a Scenic and Wildlife Management Refuge Area in recognition of the need to preserve the area as a unique rural landscape. The restored Freel's cabin (circa. 1820), which is also located within the designated area, also provides an example of early settlements along the Clinch River.

In addition, the Three Bends Area contains University of Tennessee agricultural research facilities where early studies to determine the acute and chronic effects of radiation exposure were conducted. These features capture both the cultural landscape of the early settlement in the area, and provide a glimpse of post-World War II activities which closely support the mission and purpose of the MP-HNP.

The Environmental Quality Advisor Board (EQAB) believes that inclusion of the Three Bends Area in the MP-HNP would:

1. Broaden the appeal of the Park and enhance the visitor experience by including natural areas as well as a glimpse of rural life in the area before the Manhattan Project,
2. Enhance the MP-HNP and provide a potential link to Oak Ridge's unparalleled system of greenbelts and greenways.
3. Provide continued protection and preservation of old growth forest and rare and endangered plants and animals.
4. Provide a broad array of recreational activities through the National Park Service (NPS) management of the Area in conjunction with the City's management of the Clark Center Park; and
5. Further establish our City's commitment to historical preservation and environmental protection within the community.

EQAB therefore requests that the Oak Ridge City Council formally recommend that the National Park Service (NPS) include the Three Bends Scenic and Wildlife Management Area in the designated footprint of the MP-NHP and strive to highlight the historical and ecological significance of the Area as the park is developed.

Ideas from Donna Kridelbaugh about making the case for City tracking of energy use and other sustainability metrics for tracking progress toward Climate Action Plan Goals:

1. One thing would be to show how other cities are getting recognition for their efforts, the funding they are getting and what value that has for attracting new residents. For example Knoxville was selected to compete among cities in the Georgetown University Energy Prize worth \$5M. Here is the recent public radio episode on the city's participation in the contest (I still need to listen to it): <http://wuot.org/post/dialogue-energy-consumption-and-sustainability-knoxville>
2. Another point might be to show how much funding is available out there for the city in relation to sustainability efforts. For example, I just ran across a Request for Information from DOE on Cities Leading through Energy Analysis and Planning (Cities-LEAP). This is in advance of a potential funding announcement for cities to get funding to help cities meet their climate and energy goals. Comments are due by May 29th and may be worth input from EQAB/COR. Here's the RFI: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=275886>
3. The city is bolstering a reputation of being a "green city" such as with the TVA platinum community status that they listed on their sustainability website page, along with other related designations and initiatives. This status is aided by having a CAP. If there is not a strong commitment to monitoring progress on the CAP then such green city status may be in jeopardy.

Data required for GHG emissions inventory

Energy/emissions category	City Emissions		Community Emissions		Information Sources
	Data required	units	Data required	units	
Electricity	Annual total or monthly kWh for all City accounts (identified/classified by lighting/traffic, buildings, water/sewer, and schools/parks/recreation)	kWh	Total annual (or monthly) kWh for: Sum of all residential accounts; Sum of all commercial accounts (exclusive of City and OR schools); Sum of all school system accounts	kWh	ORED/utilities billing office
Natural Gas	Annual Total Municipal Green Power purchases	kWh	Annual Total Residential Green Power purchases	kWh	
Transportation Fuels/Miles	Total annual (or monthly) natural gas consumption (and cost?) for all COR accounts (City buildings, primarily)	CCF	Total annual (or monthly) natural gas consumption for: Sum of all residential accounts; Sum of all commercial accounts (exclusive of City accounts?); All school system accounts	CCF	ORUD/Public Works
	City vehicles: Total annual mileage and gasoline/diesel fuel consumption for each vehicle	mi., gal			Public works, TDOT
Solid waste disposal and recycling	Employee commute: numbers of City employees by residence by zip code (for estimating commuting vehicle miles)	#	Estimate/index of total annual vehicle miles traveled (VMT)	VMT	Human Resources?
	Annual total mass of municipal solid waste and recycling streams	ton	Annual total mass of community (residential) solid waste and recycling streams	ton	Waste Connections

Recommendations

1. Reach out to ORUD and Waste Connections to develop agreements (contract amendments?) that support City collection of the necessary data (ng, solid waste, recycling)
2. Identify areas in which City could benefit from improved acquisition and use of energy consumption information