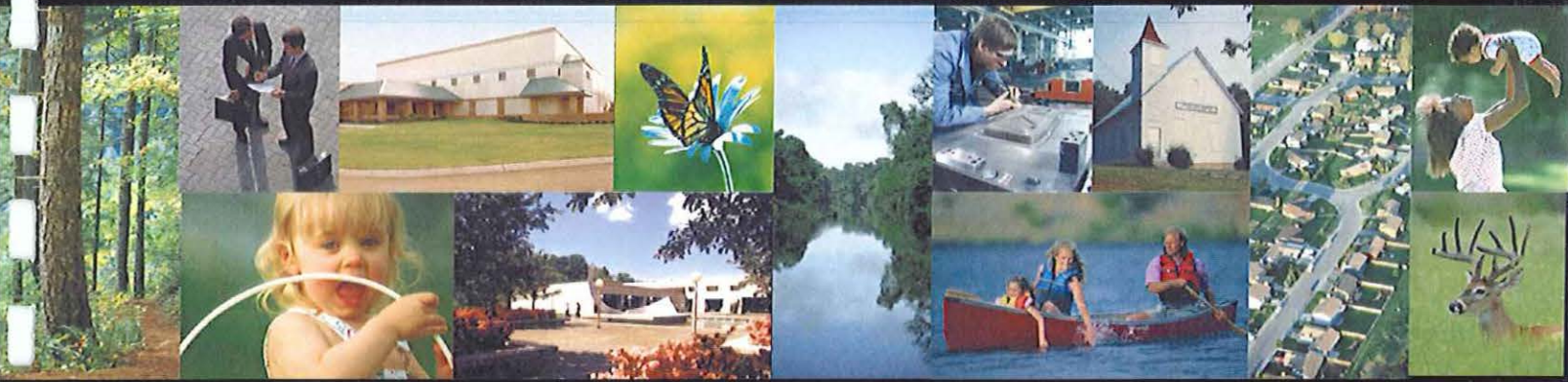


final report of the  
*Oak Ridge Land Use Planning Focus Group*



*September 2002*

**Final Report  
of the  
Oak Ridge Land Use Planning Focus Group**

**September 2002**

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## EXECUTIVE SUMMARY

The Oak Ridge Land Use Focus Group met, at the U.S. Department of Energy's invitation, once a month from September 2001 to September 2002 to develop suggestions for the utilization of land in the northwest portion of the Oak Ridge Reservation (ORR). The principal results of this land use planning process are listed below.

### General Agreement on Land Use Scenarios

- For the four land use scenarios considered, there was general agreement on use of approximately 87% of the land under consideration.

### Multiple Options Suggested for Remaining Land

- The Focus Group had mixed feelings about uses for the remaining land, as reflected in discussions of and conclusions for the four land use scenarios. While there were some preferences, no one scenario could be judged as representing a consensus of the Focus Group.

### Values Identified

- In considering these scenarios and the analyses of their relative impacts, the Focus Group agreed upon several "values" that should be reflected in any action regarding the disposition and/or management of the land. The five most highly ranked values, in decreasing order of importance, were:
  1. Protect Threatened/Endangered Species
  2. Concern for Water Quality
  3. Increase Oak Ridge Tax Base
  4. Concentrate Any New Industry
  5. Increase Number of Jobs in Oak Ridge

### Three Resolutions Drafted by Focus Group

- The Focus Group drafted three resolutions concerning the ORR Land Use Planning process. While not unanimous, the group recommends the following:
  - A. Resolution on Land Preservation—"The Focus Group recommends that the Department find means for the perpetual preservation of land areas designated by the Focus Group for green space/conservation and/or research purposes on the Preliminary Feedback Map (see Page 7). This recommendation holds regardless of the land use scenario(s), or the combinations thereof, that the Department of Energy decides to adopt for the western portion of the Oak Ridge Reservation as part of its Comprehensive Land Use Plan."
  - B. Resolution on Extending the Land Use Planning Process to the Entire ORR—The Focus Group resolved that the planning process used for the northwest portion of the ORR should be applied to the entire Reservation as soon as possible, and that stakeholder involvement has proved valuable and should be an integral part of future land use planning.
  - C. Resolution for Expanding the Analysis to Include a Biodiversity Economic Evaluation—The Focus Group also agreed that including an economic evaluation of biological resources can provide decision makers with additional data for assessing the relative values of conservation and development.

## **1. FACILITATOR'S INTRODUCTION**

This Report was prepared during the summer of 2002 to present the conclusions, suggestions, and recommendations of the Focus Group. The Focus Group consisted of a broad cross-section of the community, as well as representatives from agencies and organizations having an interest in the future of Oak Ridge Reservation (ORR) land. By signing the statement at the end of the report (Appendix F), members indicate their acceptance of this final report as representing the set of suggestions made and conclusions reached by the Focus Group. It is intended that the results of this study will become a part of the Comprehensive Integrated Plan for the ORR.

The public was invited to participate throughout the planning process at Focus Group meetings, an introductory open house and three public meetings, and through review and comment on the Draft Technical Report. The Technical Report contains an analysis of the relative effects of the four land use scenarios. A small number of the public attended most Focus Group meetings and over 50 members of the public attended some of the public meetings.

As the preparer of the Report and Facilitator for the Focus Group, I acknowledge my responsibility in its preparation for its content but with the caveat that it was reviewed and edited by Focus Group members. I also wish to express gratitude to all members of the Focus Group for their collaborative spirit throughout the project and for their assistance and cooperation in reviewing drafts and finalizing this Report. In promoting better communication and mutual understanding among sometimes competing interests, the land use planning process has benefited its participants and those who may be affected by its results and subsequent actions.

## **2. BACKGROUND TO THE LAND USE PLANNING PROJECT**

In August 2001, Leah Dever, then Manager of the U.S. Department of Energy (DOE)-Oak Ridge Operations Office (ORO), requested the assistance of several citizens and agencies to form a Focus Group in order to develop and supply suggestions on land use planning for the ORR. The Focus Group included 20 individuals with expertise on economic development, environmental and historic values, and community needs. UT-Battelle, working with DOE-ORO, formed a Facilitation Team to support the Focus Group. Please see Appendix E for lists of the Focus Group and Facilitation Team members. Midway through the process, Michael Holland was appointed Interim DOE-ORO Manager.

From the beginning of the project in August 2001, the Focus Group met almost every month. The public was invited to attend all Focus Group meetings and was provided opportunities for comments at specific times at those meetings. The Facilitation Team met before each Focus Group meeting to prepare tentative agendas, invite and coordinate invited speakers, prepare handouts and technical materials, and help to organize the flow of information to Focus Group members. The Facilitation Team also organized and conducted public meetings, workshops, and field trips to the project site. A chart, highlighting the major activities of the process, is shown in Appendix A.

The initial meetings of the Focus Group were devoted to developing a common understanding of the purposes of the Focus Group and developing a set of procedures that all members of the Focus Group, plus the Facilitator and Facilitation Team, would follow during the project. Most of these procedures concerned how and when meetings would be held; the role of the Facilitator; and expectations that Focus Group members had for the project, as well as for themselves (see Appendix B).

### **3. MISSION FOR FOCUS GROUP**

Early in the land use planning process the following mission statement was developed by Focus Group members and the Facilitator.

“The mission of the Land Use Focus Group is to provide DOE with recommendations in developing a comprehensive plan for the future use of the land resources of Oak Ridge Reservation that are currently or potentially surplus to DOE’s mission for the next 20 years. Special emphasis will be on a planning strategy for the next five years.”

### **4. THE LAND USE PLANNING STUDY AREA**

At the beginning of the land use planning process, DOE had already designated some ORR land for economic development and was considering designation of more. Utilization of the ORR for DOE programmatic needs was stated as taking precedent over any other land uses. After a review of projected programmatic needs, DOE decided that the only ORR land that would be considered for this land use planning effort would be the northwest portion (see Fig. 1). It is understood that DOE retains ‘fiduciary’ responsibility for the land retained for fulfillment of DOE’s national mission.

DOE excluded several parcels of land within the northwest part of the ORR from consideration. Areas excluded from the land use planning process were as follows:

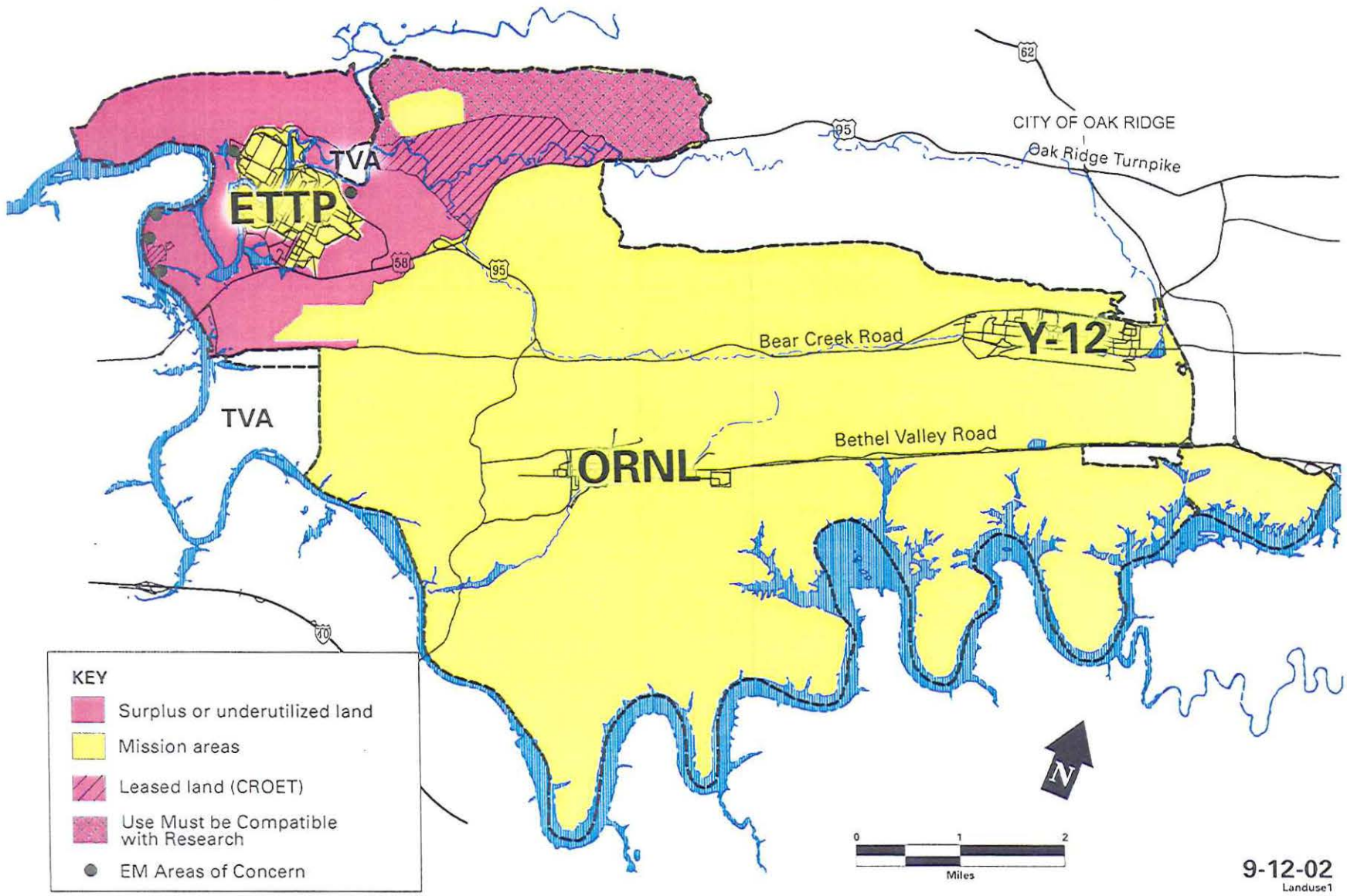
- Horizon Center (Parcel ED-1). About 1000 acres leased to the Community Reuse Organization of East Tennessee (CROET) for industrial development;
- East Tennessee Technology Park (ETTP), formerly the K-25 facility at Oak Ridge and often referred to as Heritage Center. About 1219 acres currently undergoing hazardous waste investigation and cleanup as part of the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) Program. DOE anticipates completion of the cleanup in 2008. However, the City of Oak Ridge and some land developers do not consider remediated land as prime industrial sites for new development; and
- A small site (Parcel ED-2) located along the Clinch River west of ETTP.

Also outside the purview of the Focus Group, but within the northwest study area, were a small site belonging to the Tennessee Valley Authority (TVA) and a research area on Blackoak Ridge. In addition, TVA’s former breeder reactor site (almost 1200 acres adjacent to the study area) was not considered. However, TVA recently announced that about 10% of the site might be available and suitable for industrial development.

The final study area consisted of slightly over 5100 acres.

The Wheat Historic District was included in the land use analysis and deliberations although it was understood that the buildings, cemetery, grounds, and view shed were to be protected. Also included was Parcel ED-3, a separate area considered for possible release by DOE to CROET. The Tennessee Department of Transportation improvements to State Routes 58 and 95 that run through the study area were recognized, but considered beyond the purview of the Focus Group.

# Land Use Planning Study Area Map



- KEY**
- Surplus or underutilized land
  - Mission areas
  - Leased land (CROET)
  - Use Must be Compatible with Research
  - EM Areas of Concern

9-12-02  
Landuse1

Fig. 1. Study Area map.



The Oak Ridge Regional Planning Commission had previously included the entire ORR in a yearlong land use planning effort. The result of that effort was the development of a variety of land use and zoning designations for the ORR. The Planning Commission proposed those designations for adoption by the Oak Ridge City Council. However, the City Council deferred its consideration pending the results of this Focus Group's conclusions. Subsequently, the Planning Commission and the City Council have established a new Federal Industry and Research Zoning designation for the entire ORR. That designation is essentially a "place holder" until specific land use determinations have been made.

## **5. SELECTING ISSUES AND SETTING FOCUS GROUP AGENDAS**

Throughout the land use planning process, the Focus Group guided the Facilitation Team in determining the issues to be addressed, the technical information to be included in the planning effort, and the general agenda for each meeting. The Focus Group made suggestions regarding the type of information to be collected and often arranged for speakers to be invited to address the Focus Group. Guest speakers came from the economic development community, the City of Oak Ridge Department of Community Development, the University of Tennessee, and the environmental community.

At the same time, DOE brought evolving issues relevant to the land use planning process to the Focus Group at its monthly meetings. Often the input and thoughts of the Focus Group members were solicited on these issues. At other times, the purpose was primarily informative. A major objective of the Focus Group meetings was to ensure that members had the opportunity to hear and understand the various perspectives and interests represented on the Focus Group.

In general, all parties tried to identify issues or other background information that would help the Focus Group fulfill its mission. It was generally believed that the Focus Group would better reflect community feelings regarding land use planning in the study area if there was unanimity or consensus among Focus Group members on issues of importance. At the same time, there was a realization that it might not be possible to have such consensus on every issue; and in such cases, it was judged appropriate to include opinions shared by at least a number of members.

## **6. VALUES UNDERLYING THE DEVELOPMENT OF SCENARIOS**

While information shared by the Focus Group helped to sensitize members to the interests of others, each member maintained his/her own perspective on important issues related to alternative land uses for the study area. However, some members, believing that division among members was not as great as many feared, suggested testing the hypothesis. A survey was developed by the Facilitation Team to determine what "values" were shared/not shared among members. If there were even a few values on which there was significant consensus, they might provide a basis for agreement on some of the land use challenges.

Possible values were derived from Focus Group discussions, presentations, and other information presented to and shared by the Focus Group. In January 2002, the Focus Group members participated in the survey. The results, if averaged for the entire Focus Group, showed how important each value was to the members. More significantly, however, when the responses were divided into two categories – responses from those with a primarily environmental perspective and responses from those inclined more toward an economic development perspective – it led to some even more revealing results. Appendix C contains a more complete description of the values survey.

Focus Group members had been asked, individually, to rank each value in importance from 1 – least important, to 5 – most important. Both subgroups scored 15 of the thirty values greater than 3.50 in relative importance and agreed in common on a set of five values – ranked 3.50 or higher for both subgroups. These are shown below (see Tables 1 and 2) in the order in which they were scored from the highest.

**Table 1. Values That Both Economic and Environmental Perspectives Ranked Very Important (>3.50)**

<b>Value</b>	<b>Overall</b>	<b>(Eco, Env)</b>
Protect Threatened/Endangered Species	4.26	(3.56,4.90)
Concern for Water Quality	4.22	(3.67,4.78)
Increase Oak Ridge Tax Base	4.21	(4.89,3.60)
Concentrate Any New Industry	4.06	(3.78, 4.33)
Increase Number of Jobs in Oak Ridge	4.00	(4.22, 3.80)

**Table 2. Values That Both Economic and Environmental Perspectives Ranked Important (> 3.00)**

<b>Value</b>	<b>Overall</b>	<b>(Eco, Env)</b>
Minimize Land Fragmentation	4.00	(3.33, 4.60)
Clean Up CERCLA Sites Quickly	3.89	(4.63,3.30)
Conserve Natural Resource/Wildlife	3.84	(3.33, 4.30)
Protect Natural Resources for a 15-year Period of Research	3.79	(3.22, 4.30)
Increase Commercial Development in Oak Ridge	3.79	(4.44, 3.20)
Conserve Forest Resources	3.61	(3.11, 4.11)
Concern for Air Quality	3.61	(3.44, 3.78)
Public Access to Natural Resources	3.58	(3.33, 3.80)
Preserve Historical/Cultural Resources	3.58	(3.00, 4.10)
Protect Existing Wildlife	3.58	(3.22, 3.90)

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act.

Subsequently, the same survey was given to members of the public attending the first public meeting. The results were comparable, with some minor variation. In effect, the public survey substantially reinforced the value ‘statements’ made by the Focus Group.

## 7. PRELIMINARY “FEEDBACK” MAP

From the beginning of the land use planning process, it was assumed that the Focus Group would develop more than one land use scenario. It was also apparent that the Focus Group would be unable to reach consensus on a single land use scenario. However, DOE saw such an outcome as beneficial to its needs. The pros and cons of various scenarios would have been examined and comments from the Focus Group would serve DOE well as it moved forward with land use planning for the northwest area of the ORR.

With information concerning the values shared in common, the Facilitation Team sought comments on the existing and possible land use options for the study area. Members of the public and the Focus Group identified areas for conservation and/or development, and a preliminary map of these was prepared. After Focus Group discussion, clarification, and some modification to the map, the Facilitation Team produced a revised “feedback map” that became the basic tool for generating four land use scenarios. Formal agreement on the scenarios was achieved later in the process after the group discussed clarifications on intent.

The feedback map (see Fig. 2) shows that there was consensus on land use for approximately 87% of the study area and there were only a few areas where the Focus Group considered options. This map and the resulting four scenario maps were presented to the public at the second public meeting.

## 8. FOUR LAND USE SCENARIOS

After presentation of the “feedback map” and the four preliminary scenarios to the Focus Group, four more well-defined land use scenarios were developed for analytical purposes. The Focus Group agreed on the details of each of the scenarios prior to analysis. Agreement did not mean the members preferred one or more scenarios, only that comparable analyses would be done for all four scenarios (see Figs. 3 through 6).

## 9. TECHNICAL ANALYSIS CONDUCTED

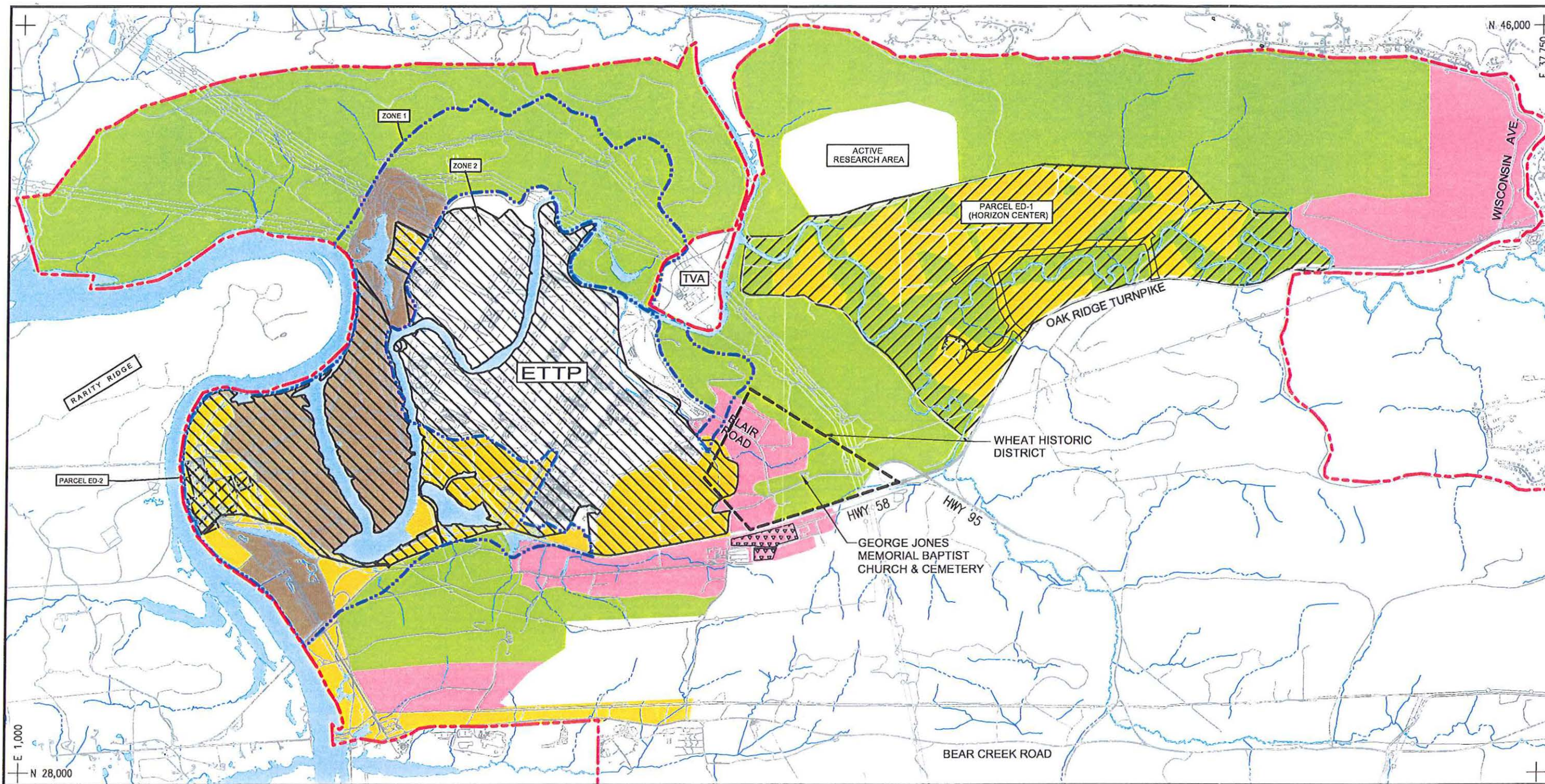
From the beginning of this land use planning process, it was agreed that an impact analysis was appropriate. Input from the Focus Group gave direction to the types of analyses undertaken by the Technical Team. In addition, the important shared values (page 5) were used to identify areas of interest for analysis. For example, considerable attention was devoted to understanding the relative differences among the four scenarios regarding socio-economic factors (e.g., number of jobs and effect on local taxes). One important example of consensus building within the Group was the general agreement reached on some of the assumptions used to compute job and income projections as part of the socio-economic analysis in the Technical Report (see page B-1, Technical Report).

The Focus Group reached similar agreements on the following areas of interest and on the type and depth of analysis and the relative emphasis to be given to each:

- Socio-economics
- Biodiversity
- Cultural Resources
- Geology and Soils
- Visual Resources
- Air Quality
- Interior Forest and Sensitive Habitat
- Surface Water
- Transportation
- Wetlands
- Utilities
- Noise and Light Pollution

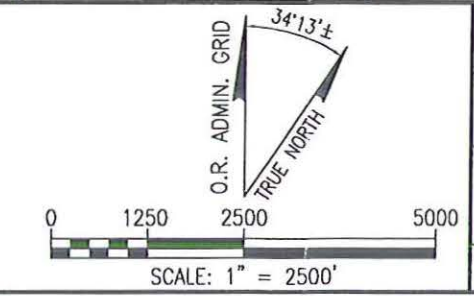
## 10. CONSIDERING THE FOUR LAND USE SCENARIOS

The Focus Group had, prior to any technical analysis, agreed that the four land use scenarios were developed for analytical purposes and that it was unlikely that any one scenario would surface as “preferred” either by the Focus Group or by DOE. With the completion of the Draft Technical Report, the Focus Group thought it would be informative to see if there was a consensus within the Focus Group for one or more of the scenarios. At its July 2002 meeting, two straw votes were taken (described in Appendix D). It is important to note that the Focus Group did not feel compelled to try to “negotiate” toward one option or another; in fact, the prevailing opinion was to use the results of the straw votes to try to reach conclusions that might be the basis for recommendations to DOE.



LEGEND:	
[Symbol]	BUILDING
[Symbol]	ASPHALT ROAD
[Symbol]	FENCE LINE
[Symbol]	STREAM
[Symbol]	POND
[Symbol]	UTILITY LINES
[Symbol]	DOE BOUNDARY
[Symbol]	ZONE 1 BOUNDARY
[Symbol]	WHEAT HISTORIC DISTRICT
[Symbol]	LEASED LAND (CROET)
[Symbol]	INDUSTRIAL/COMMERCIAL
[Symbol]	GREENSPACE/CONSERVATION AND RESEARCH
[Symbol]	OPTIONS ANALYSIS
[Symbol]	OPEN SPACE/INDUSTRIAL
[Symbol]	NEW DOE PROPOSAL FOR EXPANDED MISSION REQUIREMENTS
[Symbol]	ETTP SITE ENVIRONMENTAL ASSESSMENT AREA

**NOTE:**  
 BASED ON MARK-UP OF MAPS FROM FOCUS GROUP AND WORKSHOPS.

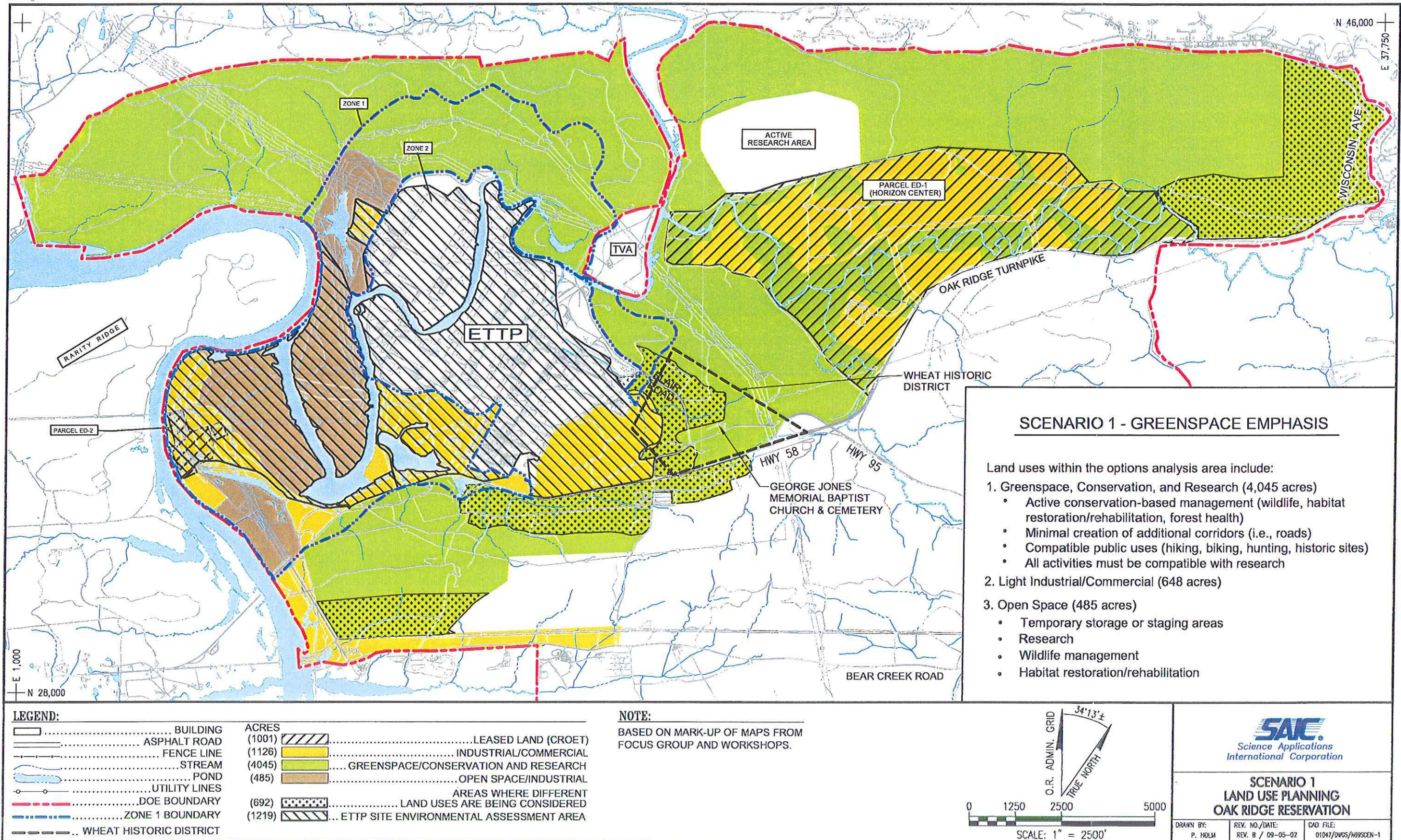


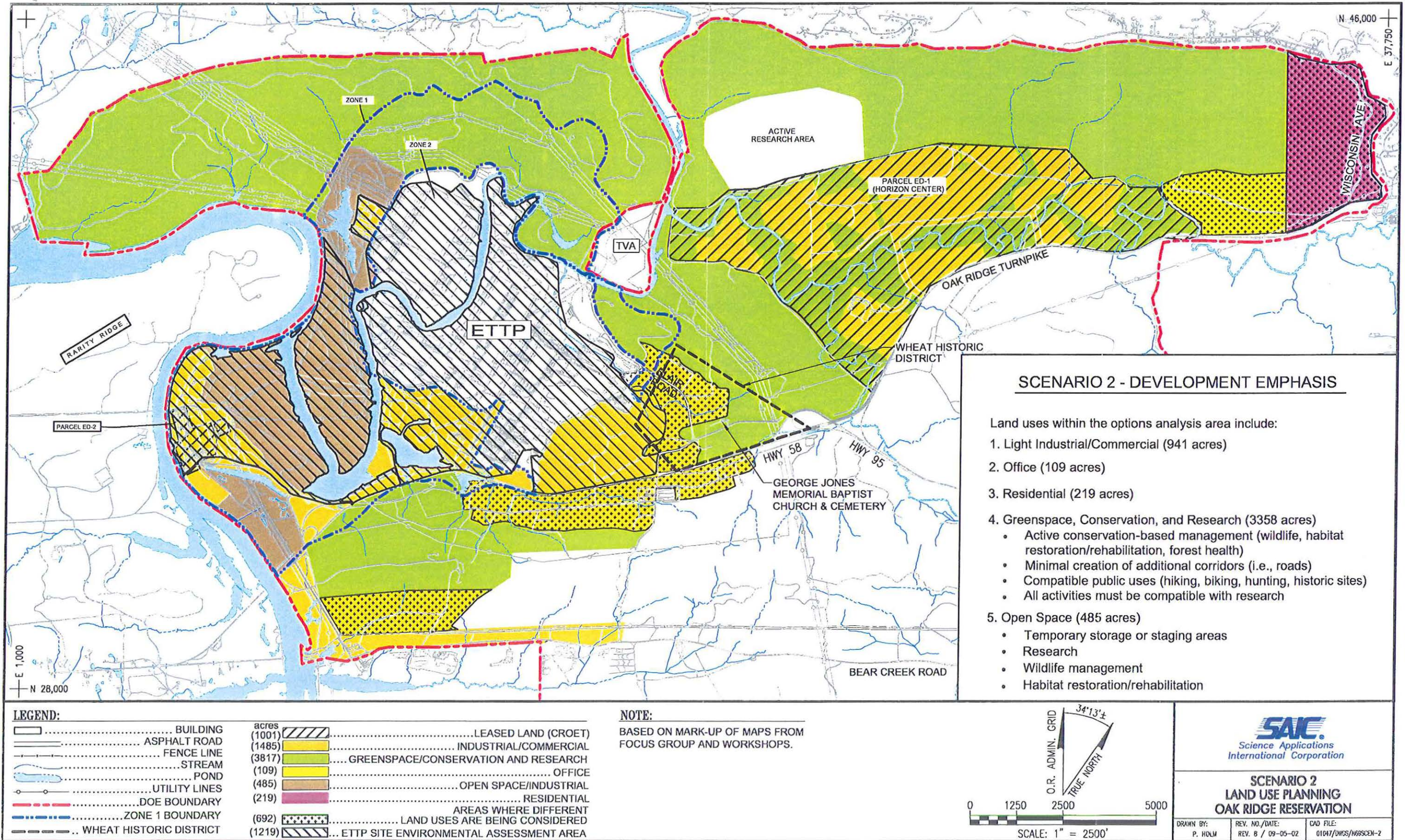
**SAC**  
 Science Applications  
 International Corporation

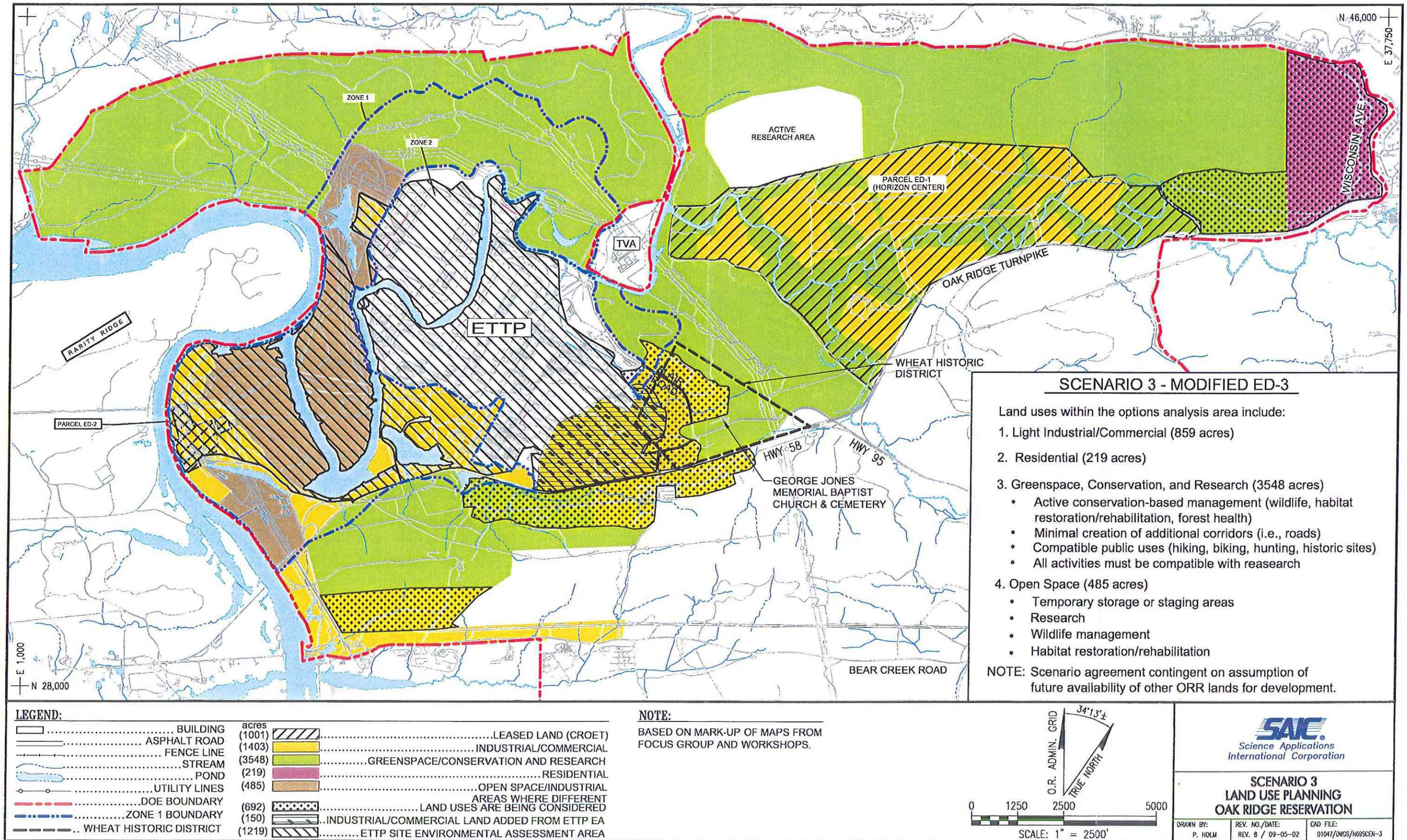
**PRELIMINARY FEEDBACK MAP  
 LAND USE PLANNING  
 OAK RIDGE RESERVATION**

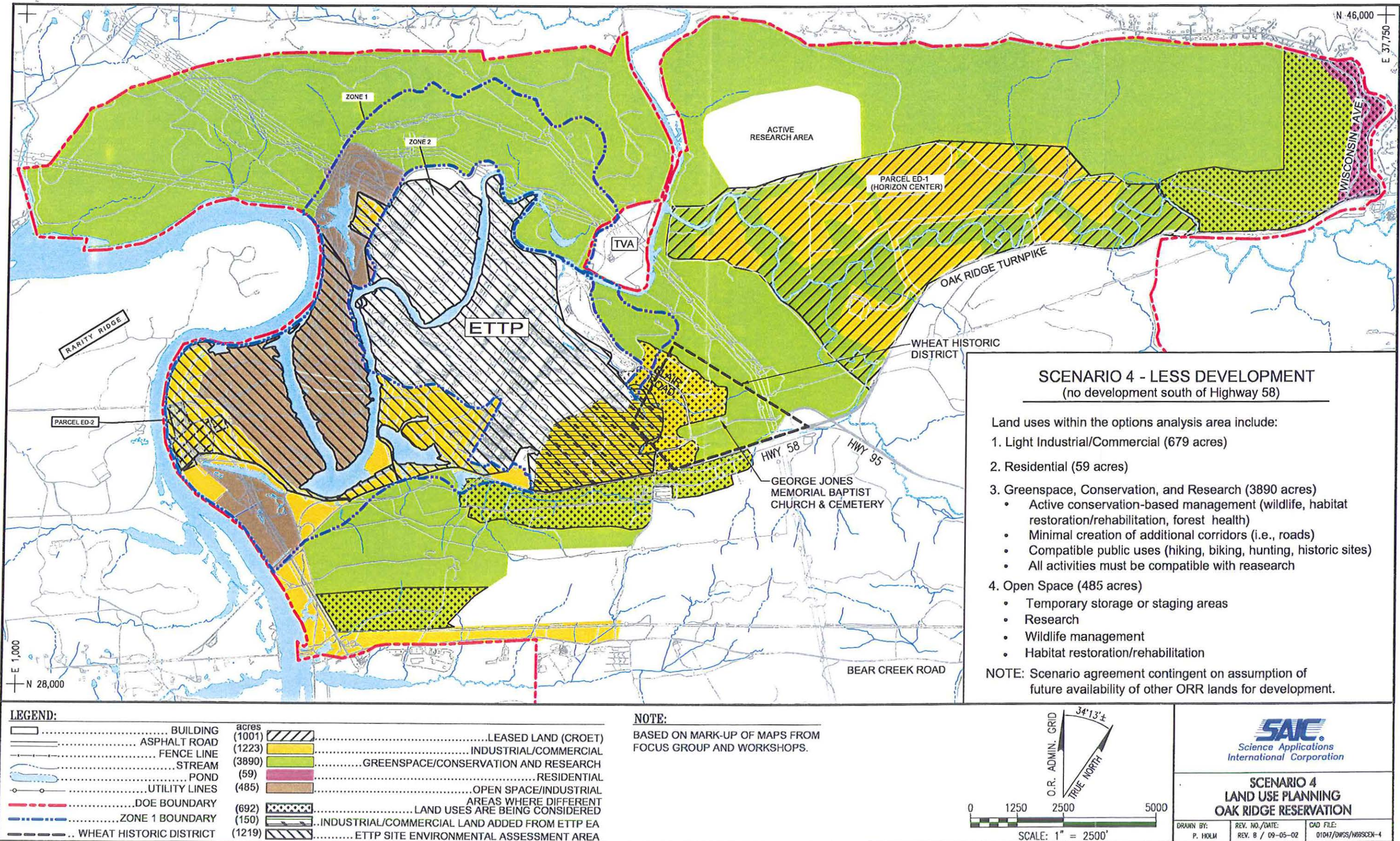
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Fig. 2. Feedback map.











A few observations can be made concerning the results of these “straw votes.” In both cases, Scenario One, the “greenspace” option received the largest number of top votes; but it also received a number of negative votes as well. Scenario Two, the “development” option, received generally lower rankings. Scenario Three, the “modified ED-3” option, did favorably well, but had the lowest number of total first and second place votes in the second poll. Scenario Four, the “less development” option, although scoring a small number of first place votes, had the highest number of second place votes, and like Scenario Three, also had only one person who ranked it last. It also had the fewest number of ‘no votes’ in Straw Vote A.

While the results could be interpreted in many ways, it was clear no one scenario was preferred by a consensus of the Focus Group. Therefore, the Focus Group agreed to present these mixed results, leaving their interpretation to DOE.

## **11. RESOLUTION ON LAND PRESERVATION**

While the Focus Group did not reach consensus on a preferred land use scenario, it generally agreed on preservation of those areas designated as greenspace/conservation and research on the Preliminary Feedback Map. The Focus Group agreed to the following resolution:

“The Focus Group recommends that the Department of Energy find means for the perpetual preservation of land areas designated by the Focus Group for green space/conservation and/or research purposes on the Preliminary Feedback Map (see Page 7). This recommendation holds regardless of the land use scenario(s), or the combinations thereof, that the Department of Energy decides to adopt for the western portion of the Oak Ridge Reservation as part of its Comprehensive Land Use Plan.”

DOE currently provides the City of Oak Ridge with a payment in lieu of taxes for all the land within the ORR that otherwise would be taxable if it were in private hands. Because these lands, if released by DOE, could potentially be subject to property taxation by the City of Oak Ridge, the City should be held ‘harmless’ as a result of any action taken to accomplish this preservation. That is, it is the Focus Group’s suggestion that the City not be deprived of comparable revenue if such preserved lands are no longer part of DOE’s ‘in lieu of tax payment’ base.

## **12. RESOLUTION ON EXTENDING THE LAND USE PLANNING PROCESS TO THE ENTIRE ORR**

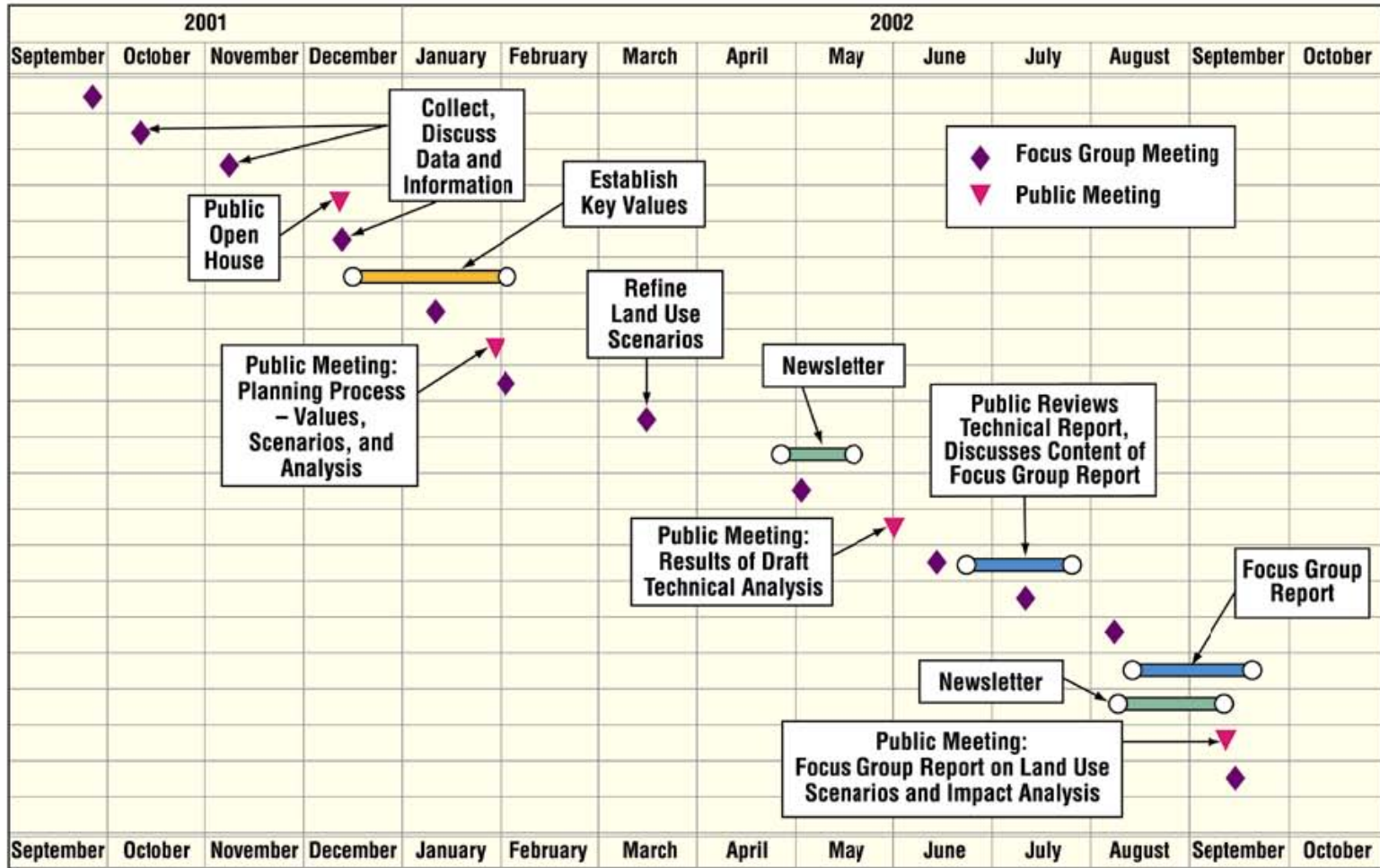
The original purpose of the Focus Group and the land use planning process was to consider the entire ORR; however, DOE reduced the study area to the northwest portion only. The Focus Group resolved, therefore, that as soon as possible the land use planning process be applied to the entire ORR. Furthermore, the Focus Group recommended full stakeholder involvement in that process.

This resolution addressed what the Group considered to be DOE’s past practice of conducting its land use planning and implementation on a piecemeal basis. While the Focus Group’s process, with its direct involvement of interested stakeholders, covered only a portion of the ORR, it was, according to the Focus Group, a refreshing change to DOE’s past practice.

### **13. RESOLUTION FOR EXPANDING THE ANALYSIS TO INCLUDE A BIODIVERSITY ECONOMIC EVALUATION**

The Focus Group also noted the potential value that using a biodiversity economic analysis could have had in providing balance to the evaluation of socio-economic impacts conducted for this study. A number of references for such an analysis were provided to the Technical Team and the suggestion made that DOE include a biodiversity economic evaluation in its land use planning for the entire ORR. Such an evaluation would provide the ‘economic’ value of open land, green space, and biological diversity, to name a few important environmental values. Furthermore, including this type of evaluation in land use planning would provide decision makers with a tool to compare the relative values of conservation and development.

## APPENDIX A TIME TABLE FOR THE LAND USE PLANNING PROJECT



## **APPENDIX B FOCUS GROUP FACILITATION PROCEDURES**

At the beginning of the land use planning process, Focus Group members agreed to the procedures listed below.

### **GENERAL**

- Start and end sessions on time.
- Respect for differing points of views.
- Facilitator recognizes speakers.
- Do not interrupt speakers; one person speaks at a time.
- Stay on topic, if possible, before going on to new subject.
- Use “I agree.”
- Facilitator uses “Is there anyone who doesn’t agree”?
- Participants may have outside conversations with facilitator; participant choice if conversations are confidential or not.
- Role of Focus Group members – insights, ideas, suggestions, and opinions.
- Role of Facilitation Team – organize sessions, determine agenda, and prepare material.
- Role of public at meetings – observe proceedings and comment at selected times in meetings.
- Use of alternate members allowed – should be minimized and alternates should be briefed by member before meeting.

### **FOCUS GROUP MEETINGS**

- Check attendance, welcome, introductions;
- Preview agenda;
- Review notes from previous session;
- Announcements;
- Public comment;
- Take up items on agenda
  - Have any scheduled presentation(s);
  - Seek perspectives, facts, and interests, hold discussion, ask questions, and draw conclusions; and
  - Identify data and information needs;
- Solicit agenda items for next focus group meeting;
- Public comment; and
- Adjourn.

## **REACHING ‘TENTATIVE’ AGREEMENTS**

- No Roberts Rules of Order – Facilitator runs session.
- Consensus (on procedures and other matters) means agreement among all Focus Group members.
- Facilitator will try to forge consensus agreements on substantive matters only if requested by Focus Group members. Minority opinions welcomed.
- Caucuses allowed, if appropriate.
- Straw voting initiated by Facilitator only to get a sense of ‘leanings.’
- On any particular topic, “No (consensus) agreement is final until everything is final.”

## **RELATIONS WITH EXTERNAL GROUPS/INTERESTS**

- Public statements may be made by any member, but when talking to others (including the media) it must be clear that one is speaking only for himself or herself and not for the Focus Group. Be courteous, respectful of others, and use decorum.
- All public statements from Focus Group are to be agreed upon beforehand by all participants and the facilitator.
- Facilitator is the spokesperson with external parties.
- Focus Group may decide to invite others to join for specific purposes (e.g., economic or environmental expertise).

## **APPENDIX C FOCUS GROUP VALUES BASED ON POLLING OF MEMBERS REGARDING ECONOMIC AND ENVIRONMENTAL VALUES**

### **INTRODUCTION**

This is a summary of an informal survey for the Oak Ridge Land Use Planning Process Focus Group in January 2002 by the project's Facilitation Team. The purposes of the survey were to determine the economic and/or environmental values that were most important to the Focus Group and to distinguish differences among subgroups of the Focus Group. The results of the survey would also help the Facilitation Team design the land use scenarios.

The survey form was designed by the Facilitation Team and distributed to members of the Focus Group. Responses were completed and preliminary results were reported at the January Focus Group meeting. This report is a more detailed analysis of the results and conclusions drawn from the analysis.

Focus Group members were asked first to identify their individual perspectives of economic and environmental values along a continuum. For this question and the follow-up question regarding one's perception of the "ideal" or most likely "acceptable" overall perspective, the scale on the continuum was calibrated from 1 to 10, with 1 representing the environmental end of the continuum and 10 representing the economic end.

Next, respondents then scored each of 30 values from "0" to "5" with "0" representing no importance, and "5" representing greatest importance. "1" and "2" were little and some importance, respectively; "3" and "4" were moderate and great importance, respectively. For the analysis, it was assumed that an average score of "3.5" or greater reflected a feeling among members that a value was of significant importance, and an average score of "4" or more would indicate even greater importance.

The standard deviation among the scores was also calculated. This measure, or statistic, served as a surrogate for the range of responses, or diversity of a particular value within the Focus Group. A low (arbitrarily less than 1.00) standard deviation meant that there was relative agreement among the Focus Group regarding the level of importance of a value. The higher the standard deviation, the more varied (i.e., less agreement) were the responses to a value.

As part of the analysis and on the basis of responses given by Focus Group members, the Group was also divided into two subgroups: those who considered their perspectives to be more environmental (n=10) and those who considered their perspectives to be more economic (n=9).

### **OVERALL RESULTS**

#### **Perspectives**

Interpreting responses to the first two questions showed that halfway between the two ends of the continuum was a so-called "balanced" perspective of 5.50. As shown in Tables C.1 and C.2 on the next page, the average of all respondents was 5.11, that is, slightly more toward the environmental side than the economic. Given that there was one more respondent from the environmental side, one could argue that the average respondent was sufficiently close to half way to be called "balanced." Furthermore, the "ideal" perspective (5.03) was just slightly different from the "balanced" perspective of the average respondent.

**Table C.1. Values That Both Economic and Environmental Perspectives Ranked Very Important (>3.50)**

<b>Value</b>	<b>Overall</b>	<b>(Eco, Env)</b>
Protect Threatened/Endangered Species	4.26	(3.56,4.90)
Concern for Water Quality	4.22	(3.67,4.78)
Increase Oak Ridge Tax Base	4.21	(4.89,3.60)
Concentrate Any New Industry	4.06	(3.78, 4.33)
Increase Number of Jobs in Oak Ridge	4.00	(4.22, 3.80)

**Table C.2. Values That Both Economic and Environmental Perspectives Ranked Important (3<3.50)**

<b>Value</b>	<b>Overall</b>	<b>(Eco, Env)</b>
Minimize Land Fragmentation	4.00	(3.33, 4.60)
Clean Up CERCLA Sites Quickly	3.89	(4.63,3.30)
Conserve Natural Resource/Wildlife	3.84	(3.33, 4.30)
Protect Natural Resources for 15-year Research	3.79	(3.22, 4.30)
Increase Commercial Development in Oak Ridge	3.79	(4.44, 3.20)
Conserve Forest Resources	3.61	(3.11, 4.11)
Concern for Air Quality	3.61	(3.44, 3.78)
Public Access to Natural Resources	3.58	(3.33, 3.80)
Preserve Historical/Cultural Resources	3.58	(3.00, 4.10)
Protect Existing Wildlife	3.58	(3.22, 3.90)

CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act.

The standard deviation of these two perspectives was 2.05 and 1.24, respectively. This meant that the range of responses to individual perspectives was greater than the range of responses to the “ideal” perspective – the one believed to be found mutually acceptable to all Focus Group members. After separating respondents into the two subgroups, it was found that among those who categorized themselves on the environmental side, the average respondent felt the most acceptable perspective was closer to the “balanced” perspective than their own perspective. The same observation can be made of those who categorized themselves on the economic side. Both subgroups appeared to be saying that the most acceptable balance was generally more toward the “middle of the road” than their own perspectives.

However, although the “acceptable” position was closer to the middle for both subgroups, the average respondent from neither group actually came all the way toward the “middle.” If 5.50 were considered middle, the environmental subgroup scored 4.17 on “acceptable to Focus Group” while the economic subgroup scored 5.89. On this basis alone, it appears that there is some room for compromise on the survey values. However, there are also important areas of disagreement that will have to be negotiated if there is to be consensus on one scenario. If not, two or more scenarios will have to be developed.

### **Economic and Environmental Ranking of Values**

Tables C.1 and C.2 on the following page provide, in rank order, the average scores of all respondents for the top fifteen values in the survey. The three highest average scores went to “the protection of threatened and endangered species,” “concern for water quality,” and increases to the City of Oak Ridge tax base.” Six values average 4.00 or greater, 15 averaged greater than 3.50.

With regard to the standard deviation among the 30 values, 9 values showed a standard deviation of less than 1.00, with the greatest concentration among all respondents for “conserving natural resources and wildlife” and “increasing Oak Ridge jobs.” The least agreement among Focus Group members (and thus a higher standard deviation) was for “including residential development” in the study area and for “DOE selling land in the study area.” Both of the standard deviations exceeded 2.00. In any case, the ‘average’ respondent did not judge either of these values as important.

### **Values Ranking by Subgroup**

On the basis of average scores of Focus Group members, there is general agreement (average values of at least 3.50) on 15 of the 30 values surveyed. However, it is more informative to separate the Focus Group into the two subgroups (environmental or economic) to see if there are any values that *both* of these subgroups judged as important. If this were the case, there would be basis for concluding that some values are sufficiently important to all (or at least most) Focus Group members and that these values at least should be reflected in any land use scenario developed for this project.

Tables C.1 and C.2 provide, in rank order, the list of values the Focus Group scored greater than 3.50 in relative importance. Of these values, only five were ranked 3.50 or higher for *both* subgroups, but a number of others scored greater than 3.50 on average for the entire Group (and 3.00 or more for each subgroup).



## APPENDIX D FOCUS GROUP STRAW VOTE ON PREFERENCES AMONG FOUR LAND USE SCENARIOS

The Focus Group participated in two “straw” votes to see if any preference patterns were discernible among the four land use scenarios. Based on the votes (see below), the Focus Group decided that it would leave final interpretation of the results to the U.S. Department of Energy.

### STRAW VOTE A

In the first “vote” each Focus Group member was asked to identify the relative acceptability of each scenario, as:

1. **“Clear preference, as is”** – the personal choice as it is currently portrayed;
2. **“Almost clear preference”** – the personal choice if only a minor change were made to the way it is currently portrayed;
3. **“Acceptable, as is”** – while not the first choice or ideal, one could live with its being preferred by the Focus Group; and
4. **“Almost acceptable”** –acceptable if only a minor change were made to the way it is portrayed.

If an option were unacceptable even with a minor change, he/she would not categorize it in this vote (i.e., “no vote”).

The scenarios were identified as

- Scenario One = Green Space Emphasis
- Scenario Two = Development Emphasis
- Scenario Three = Modified ED-3
- Scenario Four = Less Development

The results of this exercise are shown in the Table D.1.

**Table D.1. Results of Straw Vote A Scenarios**

Category	1 Green Space Emphasis	2 Development Emphasis	3 Modified ED-3	4 Less Development
Clear preference	7	5	3	4
Almost clear preference	2	1	5	1
Acceptable, as is	1	1	0	6
Almost acceptable	1	4	2	3
No vote	7	7	8	4

**STRAW VOTE B**

A second vote was requested, with each member ranking the four options from 1 to 4 - “1” being most preferable, and “4” being least preferable. The results of this vote are shown in Table D.2. At the bottom of the table, votes are weighted in two different ways in attempt to try and detect any pattern that might thereby become more apparent.

**Table D.2. Results of Straw Vote B Scenarios**

<b>Ranking</b>	<b>1 Green Space Emphasis</b>	<b>2 Development Emphasis</b>	<b>3 Modified ED-3</b>	<b>4 Less Development</b>
No. 1	<b>8</b>	<b>5</b>	<b>3</b>	<b>3</b>
No. 2	<b>2</b>	<b>4</b>	<b>5</b>	<b>8</b>
No. 3	<b>3</b>	<b>0</b>	<b>10</b>	<b>6</b>
No. 4	<b>6</b>	<b>11</b>	<b>1</b>	<b>1</b>
Weighted Vote (4 points for #1, 3 points for #2, etc.)	<b>50</b>	<b>43</b>	<b>48</b>	<b>49</b>
Weighted Vote (+3 points for #1; +1 point for #2; -1 point for #3; and -3 points for #4)	<b>+5</b>	<b>-14</b>	<b>+1</b>	<b>+8</b>

**APPENDIX E  
FOCUS GROUP AND FACILITATION TEAM  
MEMBERS AND ALTERNATES**

**FOCUS GROUP MEMBERS**

Steven Alexander, Senior Environmental Contaminants Biologist, U. S. Fish and Wildlife Service, Tennessee/Kentucky Field Office, Cookeville, TN

Paul Boyer, City Manager, Oak Ridge, TN

Pete Craven, Oak Ridge Businessman, Oak Ridge, TN

Scott Davis, Executive Director, Tennessee Chapter, The Nature Conservancy, Nashville, TN

Ray N. Evans, Jr., Oak Ridge City Council, Oak Ridge, TN

Parker Hardy, President, Oak Ridge Chamber of Commerce, Oak Ridge, TN

John Devereux Joslin, Chair, Advocates for the Oak Ridge Reservation, Oak Ridge, TN

Robert Kennedy, President, Friends of Oak Ridge National Laboratory, Oak Ridge, TN

Ralph Lillard, Businessman, Member, Oak Ridge Chamber of Commerce, Oak Ridge, TN

Marty Marina, Tennessee Conservation League, Nashville, TN

David McKinney, Tennessee Wildlife Resources Agency, Nashville, TN

David N. Mosby, Oak Ridge City Council, Oak Ridge, TN

William Pardue, Member, Oak Ridge Chamber of Commerce, Oak Ridge, TN

Beth Phillips, Alternate for Tony Grande, Tennessee Economic and Community Development Department, Knoxville, TN

Eric W. Rauch, Projects Manager, Tennessee Valley Authority, Knoxville, TN

Lorene Sigal, Citizen, Oak Ridge, TN

Lloyd Stokes, Oak Ridge Heritage and Preservation Association, Oak Ridge, TN

Joseph Valentino, Executive Director, Oak Ridge Convention and Visitors Bureau, Oak Ridge, TN

Marshall Whisnant, Member, Oak Ridge Regional Planning Commission, Oak Ridge, TN

Lawrence Young, President, Community Reuse Organization of East Tennessee, Oak Ridge, TN

## **FACILITATION TEAM**

Patricia Parr (UT-Battelle) managed and had overall responsibility for the effort

Marianne Heiskell [U.S. Department of Energy (DOE) Oak Ridge Operations (ORO)] was the DOE-ORO point of contact for the project

Wayne Tolbert and Mike Deacon [Science Applications International Corporation (SAIC)] were supported by other SAIC staff and were responsible for scenario impacts analysis, report preparation, meeting logistics, and technical support

Barry Lawson (Barry Lawson Associates), an independent, professional facilitator, was responsible for facilitating the Focus Group process and preparing the Focus Group Report

## **APPENDIX F SIGNATURES OF FOCUS GROUP MEMBERS**

The signatures below indicate that the individual members of the Oak Ridge Land Use Planning Focus Group accept this Final Report as representing the set of suggestions made and conclusions reached by the Group. Each individual has participated as an individual and one's signature does not necessarily indicate the acceptance or approval of one's organization or agency. Signed September 13, 2002.

\_\_\_\_\_ Steven Alexander  
\_\_\_\_\_ Paul Boyer  
\_\_\_\_\_ Pete Craven  
\_\_\_\_\_ Scott Davis  
\_\_\_\_\_ Ray N. Evans, Jr.  
\_\_\_\_\_ Parker Hardy  
\_\_\_\_\_ John Devereux Joslin  
\_\_\_\_\_ Robert Kennedy  
\_\_\_\_\_ Ralph Lillard  
\_\_\_\_\_ Marty Marina  
\_\_\_\_\_ David McKinney  
\_\_\_\_\_ David N. Mosby  
\_\_\_\_\_ William Pardue  
\_\_\_\_\_ Beth Phillips  
\_\_\_\_\_ Eric W. Rauch  
\_\_\_\_\_ Lorene Sigal  
\_\_\_\_\_ Lloyd Stokes  
\_\_\_\_\_ Joseph Valentino  
\_\_\_\_\_ Marshall Whisnant  
\_\_\_\_\_ Lawrence Young