

**ALTERNATIVES DEVELOPMENT GROUP (ADG)
SOUTHWEST FLORIDA ENVIRONMENTAL IMPACT STATEMENT
MEETING #10, AUGUST 27 AND 28, 1998**

MEETING NOTES: Draft

The notes provided below document the main points and meeting progress that were offered during the meeting on August 27 through August 28. The notes highlight and summarize the key issues that were discussed at the ADG meeting. The following section provides an overall summary of the meeting, and the remaining sections summarize each of the agenda items as they occurred in the meeting. Selected attachments are provided in this document. Any comments on accuracy of these notes are welcome and will be reflected in a subsequent version of this meeting report. Note that copies of this document were provided electronically either through e-mail, facsimile, <http://www.saj.usace.army.mil/permit/projects.htm>, or <ftp://ftp.saj.usace.army.mil/pub/bbarron/readme.htm>. Attachments are included in the electronic version when reasonably possible. Otherwise, the full version with all attachments will be distributed at the next ADG meeting.

Meeting Overview

The Alternatives Development Group (ADG) met on August 27 through 28, 1998, at the Collier County Extension Service, Naples, Florida. Thirty-two of the thirty-three members were represented at the meeting. The roster of attendees is presented in Attachment A. The objectives of this meeting were to (1) evaluate the alternatives developed for Sections A and D of the study area, (2) clarify and evaluate the alternatives developed for Section B, hub, of the study area, (3) evaluate the Comprehensive Plan alternative for Section C of the study area, and (4) review the outline of the draft report. Data sources, references, and maps provided throughout the ten meetings are listed in Attachment B.

The meeting began the morning of August 27 with administrative announcements followed by the introduction of members/alternates, observers, and the facilitation team. Dale Brown and Tim Feather, lead facilitator and project manager for Planning and Management Consultants, Ltd., respectively, presented the agenda for the tenth meeting.

Announcements were made by Bob Baker and Ron Inge. Bob Baker presented a petition regarding hurricane evacuation. This petition is provided in Attachment C. Ron Inge provided an argument for the use of local mines for the purpose of construction. This document is provided in Attachment D.

The ADG was presented with GIS output tables for Section D of the study area. These tables are presented in Attachment E. The ADG heard overviews of the alternatives developed for Sections D and A of the study area. The ADG broke into their four factor specialty subgroups to evaluate the five alternatives developed and the Comprehensive Plan for each Section. The factors used to evaluate the alternatives are listed in Attachment F. Evaluations of alternatives for Section D by the twelve issue categories are presented in Attachments G through R. The GIS output tables for Section A of the study area are presented in Attachment S. Evaluations of alternatives for Section A by the twelve issue categories are presented in Attachments T through AE.

The factor specialty group for the issue category of regulatory efficiency and effectiveness re-addressed the factors by which alternatives are evaluated. Previously, the group developed three evaluation factors. The means by which these factors were measured did not allow for the discrimination among alternatives. Thus, the group developed new measurement concepts as presented in Attachment AF and applied them to the re-evaluation of Section B alternatives.

The ADG was presented with clarifications to the alternatives developed for Section B of the study area. Given these clarifications, the factor specialty groups re-evaluated the alternatives and placed them on the continuum of best to worst by issue category. Many of the issue categories experienced some changes in placement of alternatives on the continuum given the clarifications presented to the ADG. Attachment AH presents the initial evaluation at meeting eight and the final evaluation at meeting ten.

Current GIS information for the Comprehensive Plan alternative for Section C was presented to the factor specialty groups. The factor specialty groups evaluated this alternative. However, this evaluation did not impact the placement of the alternatives on the continuum of best to worst by issue category.

John Hall provided closing remarks. Then, Tim Feather presented an outline of the report to be included in the Environmental Impact Statement. Lastly, the ADG agreed to meet again on October 13 and 14 to receive a presentation of the report. Prior to this meeting the ADG will be provided a copy of the draft report for review. Comments and questions concerning the draft report will be provided to Planning and Management Consultants, Ltd. prior to the October meeting.

Administrative Activities

Dale Brown and Tim Feather opened the meeting with administrative activities. These activities included (1) administrative announcements, (2) overview of the ninth meeting, and (3) presentation of the agenda.

Administrative Announcements

The tenth ADG meeting was brought to order on Thursday, August 27, 1998 at approximately 9:15 a.m. Mr. Brown addressed administrative issues regarding facilities, lunch, and other logistical items. The group was reminded to check the sign-in sheet for attendance. Mr. Brown began the meeting by requesting introductions of members, alternates, observers, and the facilitation team members.

Ninth Meeting Overview

Tim Feather presented an overview of the ninth ADG meeting using presentation materials provided in Attachment X of the notes from the ninth meeting. Mr. Feather presented the (1) activities, (2) accomplishments, and (3) next steps.

An ADG member made clarification on the issue of pre-existing activities. Also, clarifications were made to the descriptions of Alternatives 1, 2, and 4. Lastly, there were discussions concerning the evaluation of alternatives using the factors developed for the issue category of regulatory efficiency and effectiveness. It was agreed that all alternatives for Section C were considered equal and should be located at the best end of the continuum. See Attachment J of the notes from meeting nine.

The method of distribution of the meeting notes will be the use of the Jacksonville District's ftp site (<ftp://ftp.saj.usace.army.mil/pub/bbarron/readme.htm>). A complete set of the final notes from meeting nine will be provided hardcopy via mail.

Agenda

The agenda for the tenth meeting was presented by Tim Feather. The ADG was presented the GIS products necessary to evaluate the alternatives developed for Sections A and D of the study area. The factor specialty groups evaluated the alternatives developed for Sections A and D. Spokespersons for the alternatives development subgroups that developed alternatives for Section B, hub, of the study area presented an overview and any clarifications of the alternatives for the purpose of improved understanding and evaluation of alternatives by the factor specialty groups. The factor specialty groups were provided corrected GIS output tables for the Comprehensive Plan alternative for Section C of the study area. Then, the factor specialty groups evaluated the Comprehensive Plan alternative and located it with respect to the other alternatives on the continuum of best to worst. Lastly, the ADG was presented an overview of the outline for the draft report.

Announcements

Announcements concerning the issues of hurricane preparedness and mining were made by members of the ADG. Bob Baker presented a petition by the Council of Civic Associations, Inc. concerning hurricane preparedness. The petition is presented in Attachment C. Also, Ron Inge presented an argument for local mining versus mining outside of the region. The corresponding letter and economic analysis are provided in Attachment D.

GIS Products

Tim Feather presented the GIS representations of the ADG's alternatives for Sections A and D of the study area. The ADG developed five alternatives for each section at meeting nine. Spokespersons representing the alternatives development subgroups presented a brief overview of their respective alternative(s). Inaccuracies in the GIS representations were noted by the spokespersons.

Given the alternatives and current GIS overlays, tables were generated to provide information necessary for the evaluation of Sections A and D alternatives. These tables for Sections D and A are provided in Attachments E and S, respectively.

Evaluation of Section D Alternatives

The factor specialty groups evaluated the five alternatives developed at meeting nine for Section D as well as the Comprehensive Plan alternative. These alternatives are described in the notes from meeting nine. GIS output tables for Section D are presented in Attachment E. Spokespersons representing each of the four alternatives development subgroups presented brief overviews of the alternatives.

Dale Brown stated that for the purpose of reporting and clarification, the groups should provide quality explanations for the evaluation of the alternatives. Then, the factor specialty groups were directed to determine the best and worst alternatives by issue category. All other alternatives would be placed on a continuum between the best and worst alternatives by issue category. Then, the factor specialty groups presented their evaluations to the ADG.

Property Rights

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. To address the issue of property rights the group utilized three factors. These factors are presented in Attachment F. The evaluation of

the alternatives by factor are also provided in Attachment G. Once the alternatives were evaluated, the best and worst alternatives with respect to property rights were determined. The remainder were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment G.

The factor specialty group for each of the three factors rated the alternatives on a scale of one to four by factor where a score of one is worst and four is best. The alternatives were placed on the continuum of best to worst based on the total score of the three factors. The Comprehensive Plan and Alternative 4 each received the most possible points of twelve. These alternatives recognize existing land uses as well as not expanding the preservation boundaries of Camp Keis Strand and similar tributaries. Alternative 2A was located in the middle of the continuum receiving a score of six. This alternative did restrict agriculture but did not include the Big Cypress Area of Critical State Concern (BCACSC) criteria. Also, it did not explicitly provide for flowways through the southern portion of Golden Gate Estates. Alternative 1, 2B, and 3 were scored equally receiving scores of three. These alternatives had intense restrictions on agriculture including the BCACSC criteria. Also, these alternatives did not recognize existing land uses such as the Ford test track and expanded the CREW boundary.

Local Land Use Policy

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group, to address the issue of local land use policy, utilized two factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment H. Each evaluation factor was measured on a scale of one to four where a score of one is worst and four is best. The scores by factor were summed to produce a grand total. The highest possible score was eight points.

Once the alternatives were evaluated, the best and worst alternatives with respect to local land use policy were determined by total score. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment H.

Alternatives 4 and the Comprehensive Plan were considered the best in terms of local land use policy. Each scored five out of eight possible points. The worst alternatives in terms of local land use policy were 1 and 3 each receiving a score of two out of eight. These alternatives had the most criteria for restrictions and placed additional agricultural land into preservation. Alternatives 2A and 2B were given slightly higher scores than Alternatives 1 and 3 since they did not explicitly restore flowways through southern Golden Gate Estates. An ADG member questioned the intent of flowway restoration of Alternatives 2A and 2B. A spokesperson for the alternatives development subgroup that created these two alternatives stated that these alternatives approach the restoration of the flowway across southern Golden Gate Estates

through mitigation. Thus, there is means by which to accomplish the proposed restoration. The factor specialty group stated that none of the alternatives adequately addressed hurricane preparedness.

Economic Sustainability

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of economic sustainability utilized seven factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment I. Each evaluation factor was measured on a scale of one to four where a score of one is worst and four is best. The scores by factor were summed to produce a grand total. The highest possible score was twenty-eight points.

Once the alternatives were evaluated, the best and worst alternatives with respect to economic sustainability were determined by total score. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment I.

The two best alternatives were 4 and the Comprehensive Plan in terms of economic sustainability. Both alternatives received a score of twenty-six points out of twenty-eight possible points. Both Alternatives 2A and 2B each received scores of 14 and were placed in the middle of the continuum of best to worst. Alternatives 3 and 1 received scores of nine and eight, respectively. Alternative 3 was considered to be slightly better than Alternative 1 in job creation. The factor specialty group stated that in terms of job creation non-intensification of agriculture does not promote agricultural jobs. For instance, the farming of row crops requires seasonal labor during the fall, winter, and spring but not in the summer. However, the farming of citrus requires year-round laborers.

Regulatory Efficiency and Effectiveness

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of regulatory efficiency and effectiveness applied two factors presented in Attachment F. Once the alternatives were evaluated, the best and worst alternatives with respect to regulatory efficiency and effectiveness were determined. The remainder were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment J.

However, the original assessment measure for the pre-identified impact and mitigation areas of one-hundred percent of alternative maps colored in found no differentiation among alternatives. Thus, all alternatives for section D were considered equal. All maps had all areas identified and colored appropriately. Given the ineffectiveness of these factors to discriminate among alternatives, it was suggested at meeting eight that the factors by which to evaluate alternatives need to be re-defined. Given the inability to discriminate with the current evaluation factors, the factor specialty group considered the alternatives to be equal and placed them at the best end of the continuum. The factor specialty group later at meeting ten re-defined the evaluation factors used to measure regulatory efficiency and effectiveness.

Avoidance of Wetland Impacts

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of avoidance of wetland impacts utilized two factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment K. The factors address the idea of acres and acres by level of function at risk by an alternative.

Once the alternatives were evaluated, the best and worst alternatives with respect to avoidance of wetland impacts were determined by comparing the indices of risk calculated for each alternative. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment K.

Alternative 2B was considered the best with respect to avoidance of wetland impacts. It received the lowest risk scores for both acres and functional acres of wetlands at risk. This alternative was followed closely by Alternative 2A. Both alternatives were very similar but Alternative 2B addressed the BCACSC. The worst alternative was the Comprehensive Plan. The Comprehensive Plan had both the greatest number of wetlands acres at risk and the greatest acres of high functioning wetlands at risk. Alternatives 1 and 4 was considered slightly better than the Comprehensive Plan with fewer acres at risk. The reason that Alternative 4 placed lower on the continuum than Alternative 1 was that the agricultural land in Alternative 4 was not constrained by any criteria. Alternative 3 was slightly worse than Alternative 2A.

Mitigation

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of mitigation applied two factors presented in Attachment F. The evaluation of the alternatives by

factor are also provided in Attachment L. The factors address the idea of acres available for mitigation and acres by level of function available that are not publicly owned.

Once the alternatives were evaluated, the best and worst alternatives with respect to mitigation were determined by comparing the indices of opportunity calculated for each alternative. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment L.

Alternatives 1 and 3 were considered the best alternatives in terms of mitigation. They both scored the highest ratios for both acreage and functionality. Whereas, the Comprehensive Plan alternative was determined to be the worst producing the lowest ratios for acreage and functionality. The Comprehensive Plan did not identify as much preservation as other alternatives. The remaining alternatives 2A, 2B, and 4 produced ratios that placed them in the middle of the continuum from best to worst.

Ecosystem Function, Wildlife Habitat, and Listed Species

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of ecosystem function, wildlife habitat, and listed species applied twelve factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment M. The five alternatives and the Comprehensive Plan were ranked with a total possible score of 72. The lower the score the better the evaluation of the alternative. Thus, a ranking of one is best and six worst by evaluation factor.

Once the alternatives were evaluated, the best and worst alternatives with respect to ecosystem function, wildlife habitat, and listed species were determined by assessing the total score of each alternative. The remaining alternatives were compared amongst each other based on the score received and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment M.

The best alternative with respect to ecosystem function, wildlife habitat, and listed species was alternative 1 producing the lowest score of eight. Given six alternatives and twelve factors, lowest possible score would be twelve. However, not all factors were given a score in this instance, thus, the score of eight for Alternative 1. See Attachment M. Alternatives 4 and the Comprehensive Plan were considered the worst possible alternatives for Section D of the study area receiving scores of 57 and 69, respectively. Alternatives 2A, 2B, and 3 received scores of 26, 27, and 23, respectively.

Cumulative and Secondary Impacts

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of cumulative and secondary impacts applied ten factors presented in Attachment F. The ten factors fall into two categories social and environmental factors. The evaluation of the alternatives by factor are also provided in Attachment N. Once the alternatives were evaluated, the best and worst alternatives with respect to cumulative and secondary impacts were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment N.

The factor specialty group, in order to determine the best and worst alternatives, ranked the alternatives by evaluation factor as presented in Attachment N. On a scale of one to six, where one is the worst and six is the best possible score, Alternative 1 was determined to be the best alternative with respect to cumulative and secondary impacts. It ranked highest for six of ten evaluation factors. This alternative was best for the least potential for infant mortality and crime. The best possible score is 60. However, hurricane vulnerability was considered equal for all alternatives and was not scored thus the total possible score is 54 . Alternative 1 was closely followed by Alternatives 2A, 2B, and 3 receiving scores of 40, 40, and 43, respectively. Alternatives 4 and the Comprehensive Plan were considered the worst for many of the social and environmental evaluation factors.

Public Lands Management / Use

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group, to address the issue of public lands management/use, utilized the evaluation factor presented in Attachment F. The evaluation of the alternatives are also provided in Attachment O. Once the alternatives were evaluated, the best and worst alternatives with respect to public lands management/use were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment O.

Of the six alternatives, Alternative 1 was the best with respect to public land management/use. This alternative has less agriculture, portions of Golden Gate Estates in preserve, improves panther refuge and the Big Cypress Preserve. This alternative was closely followed by Alternatives 2B and 2A, respectively. Alternative 2B was considered slightly better than 2A due to the implementation of the BCACSC criteria. Alternative 3 was placed in the middle of the continuum. Alternative 4 was considered to be next to the worst alternative not

expanding the preservation of Camp Keis Strand and including the Ford test track as industrial property. The Comprehensive Plan alternative was considered the worst allowing agriculture in the North Belle Meade which has sensitive habitat. Also, the Comprehensive Plan identified wetlands as environmentally sensitive but not in preservation status.

Water Quality

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of water quality applied five factors. These factors are presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment P. Once the alternatives were evaluated, the best and worst alternatives with respect to water quality were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment P.

The factor specialty group used a method of scoring the alternatives by factor on a scale of one to five. A score of one is best and five is worst. The water quality index factor was not addressed in this instance. Thus, the worst possible score was twenty. To determine the scores for the factor of pollution loading pollution loading values were calculated by the factor specialty group.

The pollution loading values for Alternatives 1, 2A, 2B, 3, 4, and the Comprehensive Plan were -0.05, 0.03, 0.01, 0.02, 0.08, and 0.07, respectively. The lower the value the better the alternative with respect to pollution loading. Thus, Alternative 1 is the best and Alternative 4 is the worst.

Overall, Alternative 1 was considered the best with respect to water quality with a score of five. The alternative was closely followed by Alternatives 2A, 2B, and 3 receiving scores of nine, eight, and seven, respectively. The two worst alternatives were 4 and the Comprehensive Plan each receiving the worst possible scores of twenty.

Restoration Retrofit

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of restoration retrofit applied the five factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment Q. The factor specialty group used a method of (+) and (0) to identify whether the alternative addressed the evaluation factors. The (+) signifies that the alternative addresses the factor whereas the (0) indicates that it did not.

Once the alternatives were evaluated, the best and worst alternatives with respect to restoration retrofit were determined by comparing the number of (+) received by the alternatives. The remaining alternatives were compared amongst each other based on the method described above and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment Q.

Alternatives 2A and 2B were considered the best alternatives with respect to restoration and retrofit. These two alternatives gave consideration to infrastructure. Alternatives 1 and 3 were considered next to best. These two alternatives addressed wildlife restoration and the maintenance of natural system. However, they did not address exotic species, percent of residents on septic, and BMPs in agriculture. Alternative 4 addressed none of the five evaluation factors and thus is considered the worst alternative. The Comprehensive Plan was considered next to worst.

Water Management

The factor specialty group evaluated the five alternatives developed by the ADG for Section D as well as the Comprehensive Plan alternative. The group to address the issue of water management applied seven factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment R. The factor specialty group used a method of (+) and (0) to identify whether the alternative addressed the evaluation factors. The (+) identifies that the alternative address the factor whereas the (0) identifies that it did not.

Once the alternatives were evaluated, the best and worst alternatives with respect to water management were determined by comparing the number of (+) received by the alternatives. The remaining alternatives were compared amongst each other based on the method described above and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment R.

Alternative 2B was considered the best alternative in terms of water management. This alternative addressed six of the seven factors. This alternative received two (+) for four of the six factors it addressed. Also, this alternative addressed the BCACSC criteria. Alternative 3 was next to best having more preserve area and greenways. Alternatives 1 and 2A were placed in the middle of the continuum with scores of six and five, respectively. The worst alternative in terms of water management was Alternative 4. The Comprehensive Plan was considered slightly better than Alternative 4 since it addressed infrastructure and home construction above the one-hundred year floodplain.

Evaluation of Section A Alternatives

The factor specialty groups evaluated the five alternatives developed at meeting nine for Section A as well as the Comprehensive Plan alternative. These alternatives are described in the notes from meeting nine. GIS output tables for Section A are presented in Attachment S. Spokespersons representing each of the four alternatives development subgroups presented brief overviews of the alternatives.

Dale Brown stated that for the purpose of reporting and clarification, the groups should provide quality explanation for the evaluation of the alternatives. Then, the factor specialty groups were directed to determine the best and worst alternatives by issue category. All other alternatives would be placed on a continuum between the best and worst alternatives by issue category. Then, the factor specialty groups presented their evaluations to the ADG.

Property Rights

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. To address the issue of property rights the group utilized three factors. These factors are presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment T. Once the alternatives were evaluated, the best and worst alternatives with respect to property rights were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment T.

The factor specialty group for each of the three factors rated the alternatives on a scale of one to four by factor where a score of one is worst and four is best. The alternatives were placed on the continuum of best to worst based on the total score of the three factors. The Comprehensive Plan received the most possible points of twelve followed closely by Alternative 4 with a score of nine. These alternatives recognize the expectations of the property owners. Alternatives 1, 2, and 3 received equal scores of three. Alternative 5 was considered too restrictive and received no points. All alternatives except for Alternative 4 and the Comprehensive Plan were placed at the worst end of the continuum. The group considered the Three R's (restoration, retrofit, and redevelopment) to be better than ARF (acquire, restore, and fix). The Three R's considered a willing seller whereas acquire was assumed to mean a more intense acquisition of property. An ADG member stated that Alternative 5 addressed due compensation. However, the factor specialty group stated that the alternative claimed to avoid unfair takings. Thus, Alternative 5 was considered the worst due to the concept of takings.

Local Land Use Policy

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group, to address the issue of local land use policy, utilized two factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment U. Each evaluation factor was measured on a scale of one to four where a score of one is worst and four is best. The scores by factor were summed to produce a grand total. The highest possible score was eight points.

Once the alternatives were evaluated, the best and worst alternatives with respect to local land use policy were determined by total score. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment U.

Alternatives 4 and the Comprehensive Plan were considered the best in terms of local land use policy with scores of five and six, respectively. The Comprehensive Plan is considered the standard for local land use policy. The worst alternatives in terms of local land use policy was 5 which scored two out of eight possible points. The factor specialty group stated that this alternative deviated the most from the Comprehensive Plan. Alternatives 1, 2, and 3 each scored three points. The factor specialty group stated that each of the alternatives received a score of two for the evaluation factor, hurricane preparedness.

Economic Sustainability

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group, to address the issue of economic sustainability, utilized seven factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment V. Each evaluation factor was measured on a scale of one to four where a score of one is worst and four is best. The scores by factor were summed to produce a grand total. The highest possible score was twenty-eight points.

Once the alternatives were evaluated, the best and worst alternatives with respect to economic sustainability were determined by total score. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment V.

The best alternative, the Comprehensive Plan, received twenty-four of a possible twenty-eight points. Similar to property rights and local land use policy, the Comprehensive Plan is the standard by which to compare the alternatives. Alternative 4 was considered to be the next best alternative with a score of nineteen points. Alternative 4 also proposed sixteen surface water

retention areas. Alternatives 1, 2, and 3 were considered to be in the middle of the continuum of best to worst receiving scores of twelve, nine, and nine, respectively. Alternative 5 was considered the worst with a score of four.

Regulatory Efficiency and Effectiveness

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of regulatory efficiency and effectiveness applied two factors presented in Attachment F. Once the alternatives were evaluated, the best and worst alternatives with respect to regulatory efficiency and effectiveness were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment W.

However, the original assessment measure for the pre-identified impact and mitigation areas of one-hundred percent of alternative maps colored in found no differentiation among alternatives. All alternatives maps had all areas identified and colored appropriately. Given the ineffectiveness of these factors to discriminate among alternatives, it was suggested that the factors by which to evaluate alternatives need to be re-defined. Given the inability to discriminate with the current evaluation factors, the factor specialty group considered the alternatives to be equal and placed them at the best end of the continuum.

Avoidance of Wetland Impacts

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of avoidance of wetland impacts utilized two factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment X. The factors address the idea of acres and acres by level of function at risk by an alternative.

Once the alternatives were evaluated, the best and worst alternatives with respect to avoidance of wetland impacts were determined by comparing the indices of risk calculated for each alternative. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment X.

Alternative 5 was considered the best with respect to avoidance of wetland impacts. It received the lowest risk scores for both acres and functional acres of wetlands at risk. Alternative 5 place the least number of acres of high functioning wetlands at risk. This alternative was

followed by Alternative 1 which placed more high functioning and less medium functioning wetlands at risk than Alternative 5. The Comprehensive Plan was determined to be the worst alternative placing the most acres at risk as well as the most high functioning acres at risk. Alternative 4 was second to the worst alternative. Alternatives 2 and 3 were determined to be in the middle of the continuum of best to worst. The factor specialty group struggled with the scoring of the alternatives given the concept of “Three R’s” and ARF applied in several of the alternatives which increase the number of wetland acres and functions.

Mitigation

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group, to address the issue of mitigation, applied two factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment Y. The factors address the idea of acres available for mitigation and acres by level of function available that are not publicly owned.

Once the alternatives were evaluated, the best and worst alternatives with respect to mitigation were determined by comparing the indices of opportunity calculated for each alternative. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment Y.

Alternative 2 was considered the best alternative in terms of mitigation. This alternative scored the highest ratios for both acreage and functionality. Whereas, Alternatives 1 and 3 were determined to be the worst producing the lowest ratios for acreage and functionality. Although Alternative 5 was the best for avoidance of wetland impacts, it was not considered the best for mitigation opportunities and was placed in the middle of the continuum from best to worst. The Comprehensive Plan was considered slightly better than Alternatives 4 and 5 in terms of mitigation opportunities. The factor specialty group stated that there were many opportunities in Section A to mitigate low functioning wetlands.

Ecosystem Function, Wildlife Habitat, and Listed Species

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of ecosystem function, wildlife habitat, and listed species applied twelve factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment Z. The five alternatives and the Comprehensive Plan were ranked with a total possible score of 72. The lower the score the better the evaluation of the alternative. Thus, a ranking of one is best and six worst by evaluation factor.

Once the alternatives were evaluated, the best and worst alternatives with respect to ecosystem function, wildlife habitat, and listed species were determined by assessing the total score of each alternative. The remaining alternatives were compared amongst each other based on the score received and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment Z.

The best alternative with respect to ecosystem function, wildlife habitat, and listed species was alternative 2 producing the lowest score of twelve. The Comprehensive Plan was considered the worst possible alternative for Section A of the study area receiving a score of 56. The Comprehensive Plan scored very high for protecting wetlands important for wildlife but poorly for the remaining eleven factors. Alternative 1, 3, 4, and 5 scored 30, 34, 42, and 33 points, respectively.

Cumulative and Secondary Impacts

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of cumulative and secondary impacts applied ten factors presented in Attachment F. The ten factors fall into two categories social and environmental factors. The evaluation of the alternatives by factor are also provided in Attachment AA. Once the alternatives were evaluated, the best and worst alternatives with respect to cumulative and secondary impacts were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment AA.

The factor specialty group, in order to determine the best and worst alternatives, ranked the alternatives by evaluation factor as presented in Attachment AA. On a scale of one to six, where one is the best and six is the worst possible score, Alternative 2 was determined to be the best alternative with respect to cumulative and secondary impacts receiving the least possible points of ten. It ranked highest for all ten evaluation factors. The worst alternative was the Comprehensive Plan scoring the worst possible points for seven of the ten evaluation factors.

Public Lands Management / Use

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group, to address the issue of public lands management/use, utilized the evaluation factor presented in Attachment F. The evaluation of the alternatives are also provided in Attachment AB. Once the alternatives were evaluated, the best and worst alternatives with respect to public lands management/use were

determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment AB.

The factor specialty group stated that there are very few public lands in Section A of the study area. However, of the six alternatives, Alternative 2 was the best with respect to public land management/use. This alternative had the most preserve totals including Estero Bay buffer, tributaries to Estero Bay, Six-Mile Cypress, and Hickey Creek. This alternative was closely followed by Alternatives 3 and 5. These alternatives allowed more rural residential next to Hickey Creek than Alternative 2. Alternative 5 had more restrictive criteria than Alternative 3. The worst alternatives were Alternatives 1 and 4. These alternatives provided the fewest connections and buffers. The Comprehensive Plan was considered slightly better than these two alternatives.

Water Quality

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of water quality applied five factors. These factors are presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment AC. Once the alternatives were evaluated, the best and worst alternatives with respect to water quality were determined. The remaining alternatives were compared amongst each other and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment AC.

The factor specialty group used a method of scoring the alternatives by factor on a scale of one to five. A score of one is best and five is worst. The water quality index factor was not addressed in this instance. Thus, the worst possible score was twenty.

Alternative 2 was considered the best with respect to water quality with the lowest possible score of four. Alternative 1 was considered next best alternative with a score of nine. Thus, it was second for three of the four factors and third for the fourth factor used to evaluate alternatives. The worst alternative was the Comprehensive Plan receiving sixteen out of the twenty possible points. Alternatives 3, 4, and 5 were considered in the middle of the continuum of best to worst with scores of 13, 12, and 12, respectively.

Restoration Retrofit

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of restoration retrofit applied the five factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment AD. The factor specialty group used a method of (+) and (0) to identify whether the alternative addressed the evaluation factors. The (+) identifies that the alternative address the factor whereas the (0) identifies that it did not.

Once the alternatives were evaluated, the best and worst alternatives with respect to restoration retrofit were determined by comparing the number of (+) received by the alternatives. The remaining alternatives were compared amongst each other based on the method described above and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment AD.

Alternative 2 was considered the best alternative with respect to restoration and retrofit closely followed by Alternative 1. These two alternatives were the best because they gave consideration to natural functions and wildlife. The worst alternatives were the Comprehensive Plan and Alternative 4 each scoring zero (+) for addressing none of the five evaluation factors. Alternatives 3 and 5 were located in the middle of the continuum of best to worst each with a score of one for weakly addressing natural functions and wildlife. The factor specialty group stated that the factors addressed by the alternatives were natural functions and wildlife the other three factors were not addressed by any of the alternatives.

Water Management

The factor specialty group evaluated the five alternatives developed by the ADG for Section A as well as the Comprehensive Plan alternative. The group to address the issue of water management applied seven factors presented in Attachment F. The evaluation of the alternatives by factor are also provided in Attachment AE. The factor specialty group used a method of (+) and (0) to identify whether the alternative addressed the evaluation factors. The (+) identifies that the alternative address the factor whereas the (0) identifies that it did not.

Once the alternatives were evaluated, the best and worst alternatives with respect to water management were determined by comparing the number of (+) received by the alternatives. The remaining alternatives were compared amongst each other based on the method described above and placed accordingly on a continuum of best to worst. The factor specialty group explained their placement of alternatives from best to worst to the ADG. A graphical depiction of this best to worst continuum is presented in Attachment AE.

Alternative 2 was considered the best alternative in terms of water management. This alternative scored a total of nine (+). Alternatives 3 and 4 were considered the worst scoring 3 (+) and 2 (+), respectively. Alternative 3 was considered slightly better than Alternative 4 with respect to flood depth and duration, historic flowways, and groundwater impacts. Alternatives 1,

5, and the Comprehensive Plan were placed in the middle of the continuum receiving 5 (+), 5.5 (+), and 4 (+), respectively. The factor specialty group stated that the removal of infrastructure noted in the criteria of Alternative 5 is not necessarily good for water management but may be if it decreases urban sprawl.

Regulatory Efficiency and Effectiveness

The factor specialty groups addressing the issue category of regulatory efficiency and effectiveness revisited the factors developed to evaluate alternatives in order to improve the discriminatory function of the evaluation factors. Originally, the factor specialty group developed three factors to be applied in the evaluation of alternatives. These factors were as follows:

1. Permit review time
 - certainty
 - consistency
 - clarity
 - celerity
2. Pre-identified impact, mitigation, and preserve areas
3. FWS, GFC, and general public concerns addressed

A global concern with respect to regulatory efficiency and effectiveness is agency's ability to meet the permit demand given limited resources.

The group addressing the three evaluation factors searched for factors that would address these concepts and allow for the comparison of alternatives. The group prepared a brainstorm list by evaluation factor presented in Attachment AF. The application of these potential evaluation factors are described in the following section.

Section B, Hub, Alternatives Clarification

The study area was divided into four sections A, B, C, and D. First, the ADG developed alternatives for Section B, the hub, of the study area. The first real application of the evaluation factors was to the hub alternatives at meeting eight. The development of alternatives for Sections C, D, and A and their evaluations followed. There were lessons learned throughout the development of alternatives and their evaluation. For instance, the importance of criteria tied to alternative features was recognized in the evaluation of alternatives. Given this new perspective, the ADG realized that with some clarification of criteria for the hub alternatives their respective evaluations may be significantly different for particular evaluation factors.

At meeting ten, the ADG made clarifications to the alternatives and respective criteria. Then, those alternatives were evaluated by the factor specialty groups. The following sections provide brief overviews of the eight alternatives developed by the ADG excluding the Comprehensive Plan.

Alternative 1

The spokesperson for the alternatives development subgroup that created Alternative 1 provided the ADG a brief overview and any necessary clarifications of the alternative. The group utilized the Estero Bay Agency on Bay Management (ABM) map, Strategic Habitat Conservation Area (SHCA) map, EPA wetlands map, and CREW boundary map. These maps were laid upon each other and the areas of overlap were delineated as preserve areas. This alternative used the Comprehensive Plan's definition of agriculture which allows the option of intensification of agricultural activities. The spokesperson stated that although flowways are not shown on the graphical depiction of the alternative, they should be considered in the evaluation of the alternative. An ADG member question whether this alternative recognized mining activities. The spokesperson responded that although it is not specifically addressed, mining is accounted for in the Comprehensive Plan definition for agricultural lands. It was also stated that there is not a list of standards and criteria associated with this alternative.

Alternative 2A

The spokesperson for the alternatives development subgroup that created Alternative 2A provided the ADG a brief overview and any necessary clarifications of the alternative. The group utilized the Estero Bay Agency on Bay Management (ABM) map to delineate flowways and connections. The alternative utilizes the CREW boundary to allow connections for wide-ranging species. Also, a connection was made to Lake Trafford for wide-ranging species. There are some preserve areas around the airport and Alico well fields. This alternative identifies mines and delineates them as either preserves or rural residential once mining has ceased. There are areas identified as offsite mitigation areas for the university. Urban is primarily in the coastal area and Immokalee. The areas on Section B identified as rural residential follow the criteria provided in Attachment E of the notes from meeting seven. This alternative proposed no intensification of current agricultural activities. It was also the intent of this alternative to account for the flowway design presented by Bill Hammond. A member of the ADG stated that the South Florida Water Management District (SFWMD) intends to re-plum Section B.

Alternative 2B

The spokesperson for the alternatives development subgroup that created Alternative 2B provided the ADG a brief overview and any necessary clarifications of the alternative. The group utilized the Comprehensive Plan alternative as the starting point for the development of this alternative. A compilation of the ABM, SHCA, and the Panther Priority Habitat maps was used to delineate preserve areas. Two types of agriculture activities were addressed by this alternative. Agricultural activities where there are bear and panther habitat are delineated as no intensification of agricultural activities. The remaining agricultural areas are defined by the Comprehensive Plan. All existing DRIs stand. All actual flowways are designated as such. Agricultural land east of I75 and south of State Route 82 are considered either conservation or preservation. These lands would be obtained by purchase from a willing seller or conservation easement.

Alternative 2C

The spokesperson for the alternatives development subgroup that created Alternative 2C provided the ADG a brief overview and any necessary clarifications of the alternative. This alternative utilized the ABM and SHCA maps to identify critical resource protection areas which have standards and criteria associated with them. There are identified buffer zones. There are also areas in which the Area of Critical State Concern apply and the associated criteria should be recognized in the evaluation of this alternative. In this alternative, current agricultural activities are not to intensify. However, it is not the intent of the alternative to transfer agricultural land to preservation. An ADG member asked whether this alternative addressed mining. The spokesperson noted that the alternative did recognize mining but if located in the Area of Critical State Concern the criteria apply.

Alternative 3A

The spokesperson for the alternatives development subgroup that created Alternative 3A provided the ADG a brief overview and any necessary clarifications of the alternative. It was noted that the color green applied in this alternative did not delineate preservation but a critical resource protection area. The critical resource protection area includes panther habitat, SHCA, ABM, land conservation and preservation mapped areas. There is no intensification of agricultural activities. Current urban areas remain in urban designation. Although flowways are not shown, they are intended in this alternative. Also, this alternative applies the concept of buffer/transition zones with standards and criteria. It was noted that these are usually the areas of most controversy.

Alternative 3B

The spokesperson for the alternatives development subgroup that created Alternative 3B provided the ADG a brief overview and any necessary clarifications of the alternative. This alternative was developed utilizing the work completed by the ABM and Arnold Committee. ABM principles apply to this alternative. This alternative recognizes flowways in urban and non-urban areas. Mining is recognized and is considered transitional (i.e., may be restored). All existing DRIs are recognized in this alternative. A member of the ADG expressed concern regarding the use of the ABM map and principles. The concern was that the ADG excepted the use of the ABM's work without having full knowledge of the product. However, a number of the ADG members were responsible for producing the ABM map and principles for this area. Also, the ABM products were presented to the ADG at a previous meeting.

Alternative 4A

The spokesperson for the alternatives development subgroup that created Alternative 4A provided the ADG a brief overview and any necessary clarifications of the alternative. The designation of land uses are similar to the Comprehensive Plan. The Comprehensive Plan criteria for agricultural land use apply to this alternative. This alternative is different from the Comprehensive Plan in a number of ways. This alternative recognizes and identifies flowways, mining, and recommendations of the South Lee County Watershed Plan not including the berm concept.

Alternative 4B

The spokesperson for the alternatives development subgroup that created Alternative 4B provided the ADG a brief overview and any necessary clarifications of the alternative. This alternative is very similar to Alternative 4A. However, this alternative applies the critical resource protection criteria, buffer/transition zones, and the berm concept. A concern of the ADG is the location, size, and potential impact of the berm. An ADG member asked whether the berm would also have a dual purpose as a road. The spokesperson responded that this was not the intent of the berm for this alternative. Another ADG member stated that the location of the berm as it is drawn allows for development on the west side of I75 and also negatively impacts critical wetland habitat. It was suggested that the berm follow the current urban boundary line. For the evaluation of this alternative, it was suggested that several scenarios of the berm location be reviewed by the appropriate factor specialty groups. The three berm scenarios are provided in Attachment AG.

Section B, Hub, Alternatives Re-Evaluation

The spokespersons for the alternatives provided a brief overview of their respective alternatives with any necessary clarifications to the ADG. Given these clarifications, the factor specialty groups re-evaluated the alternatives. The factors specialty groups noted whether there were changes in the placement of alternatives by the twelve issue categories on the continuum of best to worst. The evaluation and placement of the alternatives on a continuum from best to worst are provided in Attachment AH. Both the initial placement at meeting eight and the final placement at meeting ten are provided in Attachment AH.

Several issue categories were not influenced by the clarification of the alternatives. The factor specialty group addressing the issue categories of property rights, economic sustainability, and local land use policy re-evaluated the alternatives and recommended no changes to the placement of the alternatives on the continuum of best to worst. However, changes in the placement of several alternatives by issue category were realized given the clarification of alternatives.

For the issue category of regulatory efficiency and effectiveness, the re-evaluation of the hub is the first opportunity the factor specialty group had to apply several potential evaluation factors. The evaluation factors applied are presented in Attachment AH as well as the placement of the alternatives along the continuum. Applying the previous set of evaluation factors the factor specialty group could not discriminate among alternatives thus, all alternatives were considered equal and placed accordingly on the continuum. However, given the new evaluation of the alternatives each were placed appropriately on the continuum.

With respect to the issue categories of avoidance of wetland impacts and mitigation, Alternative 3A's position on the continuum was significantly impacted given the clarification of the criteria. The area delineated as green in Alternative 3A was originally assumed to be better for wetlands than was conveyed in the clarification of the alternative at meeting ten.

The berm concept had a significant impact on the placement of Alternative 4B with respect to the issue categories of (1) ecosystem function, wildlife habitat, and listed species, (2) cumulative and secondary impacts, and (3) public land management and use. The factor specialty group that addressed these issue categories used the three berm scenarios presented in Attachment AG. The placement of Alternative 4B is better if the "good" berm scenario is applied whereas if either the "bad" or "worse" berm scenarios are applied Alternative 4B is considered the worst alternative with respect to these three issue categories. Thus, Alternative 4B appears twice on the continuum of best to worst. Depending on the issue category, Alternatives 1A, 2C, and 3A were also influenced by the clarification of alternatives.

Some of the most dramatic changes in the placement of alternatives were in the issue categories of (1) water management, (2) water quality, and (3) and restoration/retrofit. Alternative 2A, given the clarification of criteria and the intent to maintain and restore natural flowways, was moved from being one of the worst alternatives to the best alternative in terms of water management. The clarification process also allowed the factor specialty group to move Alternatives 2B, 3A, 3B, and 4B next to the best, Alternative 2A, from being some of the worst alternatives. With respect to water quality, Alternative 2B moved from next to best to one of the

three best alternatives. Alternatives 2C and 3A were moved from the middle position on the continuum to the best with respect to restoration/retrofit.

Section C Evaluation of the Comprehensive Plan

At meeting nine, incorrect values were provided to the factor specialty groups regarding the Comprehensive Plan. These values were corrected to allow the factor specialty groups to evaluate the Comprehensive Plan alternative and place it on the continuum of best to worst by issue category. The GIS data tables are presented in Attachment AI. Given this new information, the factor specialty groups made no significant changes to the placement of the alternatives by issue category on the continuum of best to worst

Closing Remarks

John Hall addressed the ADG on the last day of the tenth meeting. Mr. Hall thanked the ADG and their alternates for their participation and commitment to the ADG. He commended them on their professionalism, perseverance, patience, and the products resulting from their efforts. He affectionately referred to these attributes as the four P's. Mr. Hall also congratulated the facilitation team for a job well done.

Mr. Hall noted that of the ten meetings, the ADG was able to develop and evaluate alternatives for the study area in three meetings. The previous ten meetings were valuable in that they produce quality evaluation factors and the associated information and data. He applauded the ADG for utilizing GIS technology when appropriate.

Mr. Hall stated that the ADG through this process got a taste of what the Corps has to go through daily in the permit process. He hopes the ADG has a better understanding of the complexity of the regulatory process. Mr. Hall opened the floor for comments by the ADG regarding the process. One member stated that he initially thought the ADG would center around the hub and not be able to address alternatives for the remaining study area. He was impressed that the ADG was able to address the whole study area. The ADG understood the need to make decisions although there is incomplete information. The ADG also realized that there is a lot of similarity in the alternatives and that most of the controversy centers around specific locations in the study area. One member who deals with Environmental Impact Statements (EIS) regularly, stated given everyone's input this is the best EIS product available. It was stated that this process should be applied more often. Another member of the ADG stated he had learned a lot from the process and the individual members of the ADG. This members critique was that the ADG was doing its best when they got down to the work.

Mr. Hall stated the Corps has learned from this process that county governments rely heavily on regulatory agencies for a number of reasons. He believes that the county governments

and the regulatory agencies need to work more closely in the future to avoid conflict. The Corps has also learned that surface water management practices in this region need much improvement. In addition, the Corps realizes the tendency of either individuals or organizations to assume that no cumulative impacts are realized if their project has been approved by the permitting agency(s). However, water quality of estuaries, bays, rivers, and their tributaries in this region continues to decline.

Report Outline

Tim Feather presented an outline of the final report to the ADG for review. The objective, intended audience, and outline of the report are presented in Attachment AJ. The seven chapter titles are as follows:

1. ADG Purpose and Membership
2. Report Organization and Purpose
3. Process Overview
4. Issues and Evaluation Factors
5. Alternatives Development
6. Evaluation of Issues: Themes and Direction
7. Summary and Conclusions

The alternatives and criteria will be presented in the appendices. Also, the list of ADG members and reference materials will be presented in the appendices of the report.

Meeting Eleven

The eleventh meeting will be held at The Nature Conservancy, Naples, Florida on October 13 and 14, 1998. The primary topic of discussion will be the draft report.

ATTACHMENT A

**ALTERNATIVES DEVELOPMENT GROUP
MEETING #10 ATTENDEES**

**LIST OF ATTENDEES
ALTERNATIVES DEVELOPMENT GROUP
MEETING #10, AUGUST 27 & 28, 1998**

Members Represented:

Robert S. Baker

Council of Civic Associations

Rick Barber

Chief Executive Officer

Agnoli, Barber & Brundage, Inc.

Tom Beck

Department of Community Affairs

John Cassani

Lee County Hyacinth Control District

Wayne Daltry

Executive Director

SW FL Regional Planning Council

Claudia Davenport and Clarence Tears (alternate)

Big Cypress Basin Board

David Douglas

David Douglas Assoc., N Ft. Myers Chamber of Commerce

Kim Dryden

U.S. Fish and Wildlife Service

Tim Durham

Wilson, Miller, Barton & Peek, Inc.

Gary Lee Beardsley (alternate for Clara Anne Graham-Elliott)

League of Women Voters of Lee County

William Jolly (alternate for John Folks)

Department of Agriculture and Consumer Services

Edward Griffith and Terrance Dolan (alternate)
Director of Planning
WCI Communities

David Guggenheim
The Conservancy of Southwest FL

Bill Hammond
South Florida Water Management District

Jim Beever (alternate for Bradley J. Hartman)
Director, Office of Environmental Services
Florida Game and Fresh Water Fish Commission

Gary Maier (alternate for Peggie Highsmith)
Department of Environmental Protection

Ronald Inge
Harper Bros., Inc.

Wallace Kain and Robert Loflin (alternate)
Mayor
City of Sanibel

Earl Kegg
Collier County Representative

Mark Morton (alternate for Richard Klaas)
Florida Real Estate Consultants

Terry Rice and Jeff Rhodes (alternates for Al Lucas)
U.S. Environmental Protection Agency

Karen Johnson (alternate for Chip Merriam)
Director, Fort Myers Service Center
South Florida Water Management District

Katherine English (alternate for Neale Montgomery)
Paves, Garner, Haverfield, Dalton, Harrison & Jensen

Bob Mulhere
Director, Collier County Planning

Paul O'Connor
Planning Division Director
Lee County

Robert H. Roth, P.E.
Barron Collier Partnership/Silver Strand Division

Fran Stallings and Collum Hasty (alternate)

Mark P. Strain
Gulf Bay Communities, Inc.

Kris Thoenke
Director, Everglades Project
National Wildlife Federation

Matthew D. Uhle and Mike Roeder (alternate)
Economic Dev. Coalition of Lee Co.

Whit Ward
Collier Building Industry Association, Inc.

John R. Hall
Department of the Army, Jacksonville District Corps of Engineers, Regulatory
Division

Members Not Represented:

Bonnie Kranzer
Governor's Commission for Sustainable South Florida

Observers:

Tim Jones
Lee County

Michael Simonik
The Conservancy

Nancy Payton
FWF

Bob Brumbaugh
USACE, IWR

Russell Eastenes
DEP

Jami McCormick
Lee County Port Authority

Facilitation Team:

Timothy Feather
Program Manager
Planning and Management Consultants, Ltd.

Dale Brown
Lead Facilitator
Planning and Management Consultants, Ltd.

Michael Beezhold
Meeting Recorder
Planning and Management Consultants, Ltd.

ATTACHMENT B

REFERENCES

Storm Surge Atlas - Lee & Collier Counties
Hurricane Preparedness/ Evacuation Study
Hurricane Shelter Deficit Reduction Report
Charlotte Harbor NEP Area Studies
State of Bay - Agency for Bay Management
Composite Strategies Conservation Map - Work in Progress
South Florida Study - 1973
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Soil Survey of Lee County, Florida
Soil Survey: Detailed Reconnaissance Collier County, Florida: Series No. 8 (1942)
Future Land Use Map: Collier County
Open Spaces: Collier County (map)
Generalized Existing Land Use Map, Collier County, Florida (1-7)
Future Land Use Map (map 1): Lee County
Map of Lee County: Existing Land Uses
Nominations with Secondary Screening Criteria Ratings: Lee County (map)
The 1994 Lee Plan: 1996 Codification: as amended through May 1997
Lee County Planned Development Update: revised 1998
Lee County Comprehensive Plan
Wetlands map
Lee County projects development approvals
Lee County land use database
Lee County: Planning Community Existing Conditions Summary
Strategic Habitat Conservation Areas (map)
Florida Black Bear: Potential Habitat (map)
Florida Panther: Potential Habitat (map)
Wading Bird Rookery, Bald Eagle, and Florida Scrub Jay locations
Bio-diversity Hot Spots
Collier County Manatee Mortality: 1/74-10/97 (map)
Collier County Manatee Mortality: February 1998 (map)
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Southwest Florida Region Regionally Significant Natural Resources (map)
Collier, Hendry, and Lee County Future Land Use 2010: (Southwest Florida Regional Planning Council)
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Reserve: Phase I (1993)
South Lee County Watershed Plan: draft (1998)

ATTACHMENT C

**PETITION BY THE COUNCIL OF
CIVIC ASSOCIATIONS, INC.**

ATTACHMENT D

LOCAL MINING PERSPECTIVE

ATTACHMENT E

GIS OUTPUT: SECTION D

ATTACHMENT F

EVALUATION FACTORS BY ISSUE CATEGORY

EVALUATION FACTORS BY ISSUE CATEGORY

A. *Property Rights*

- A1. Fair market value
- A2. Reasonable expectations for use of land and return on investment
- A3. Vested rights

B. *Ecosystem Function, Wildlife Habitat, and Listed Species*

- B1. Affects on GFC SHCAs habitat planning objectives
- B2. Affects on FWS type 1 & 2 panther habitat
- B3. Affects on RPC natural resource goals
- B4. Affects on FWS Recovery Plans & FL Panther Habitat Cons. Plan
- B5. Affects occurrences of listed species
- B6. Affects occurrences of rookeries
- B7. Affects loss of native plant communities (common and rare)
- B8. Affects fragmentation & connectivity of plant animal habitats
- B9. Loss of seasonal wetlands
- B10. Affects integrity of flowways (rivers, sloughs, strands)
- B11. Wetlands of important to critical wildlife
- B12. Affects on aquatic resources

C. *Regulatory Efficiency and Effectiveness*

- C1. Permit review time and level of effort
- C2. Pre-identified impact/mitigation and preserve areas

D. *Local Land Use Policy*

- D1. Significance of conflicts with local land use plans and regulations
- D2. Hurricane preparedness evacuation routes

E. *Cumulative/Secondary Impacts*

- E1. Impacts on infant mortality
- E2. Impacts on road needs
- E3. Impacts on air pollution loading
- E4. Impacts on water pollution loading
- E5. Impacts on crime rates
- E6. Impacts on hurricane vulnerability
- E7. EPA index of watershed indicators
- E8. Impacts on wetlands only
- E9. Impacts on hydrology
- E10. Amount of lands in public and private ownership in protected status

F. *Avoidance of Wetland Impacts*

- F1. Number of acres of wetland impacted
- F2. Wetland functions impacted

G. *Water Management*

- G1. Infrastructure existence - stormwater utility - maintain and improve

- G2. Home damage during storm events - level of flood protection
- G3. Home construction to meet 100 year storm event
- G4. Flood depth and duration - increase? Hurricane evacuation?
- G5. Historic flow patterns - timing, amount, location, improve and maintain
- G6. Adequate water storage - balance of consumption with hydroperiods
- G7. Groundwater data floors and ceilings - aquifer zoning

H. *Water Quality*

- H1. Pollution loading
- H2. Freshwater pulses
- H3. Habitat loss
- H4. Groundwater impact
- H5. Water quality index

I. *Economic Sustainability*

- I1. Job creation
- I2. Home affordability
- I3. Cost of living
- I4. Property tax base
- I5. Cost to implement
- I6. Increased taxes
- I7. Environmental justice

J. *Mitigation*

- J1. Total acres provided
- J2. Total wetlands-function acres provided

K. *Restoration/Retrofit*

- K1. Natural function maintained in natural systems (i.e. flowways)
- K2. Exotics control: % and size of parcels treated and restored
- K3. Percent of residents using self-supplied infrastructure (i.e. septic tanks)
- K4. Percent ag using BMPs
- K5. Wildlife habitat restoration

L. *Public Lands Management/Use*

- L1. Compatibility with land management plan / Degradation or improvement of resources on public lands

ATTACHMENT G

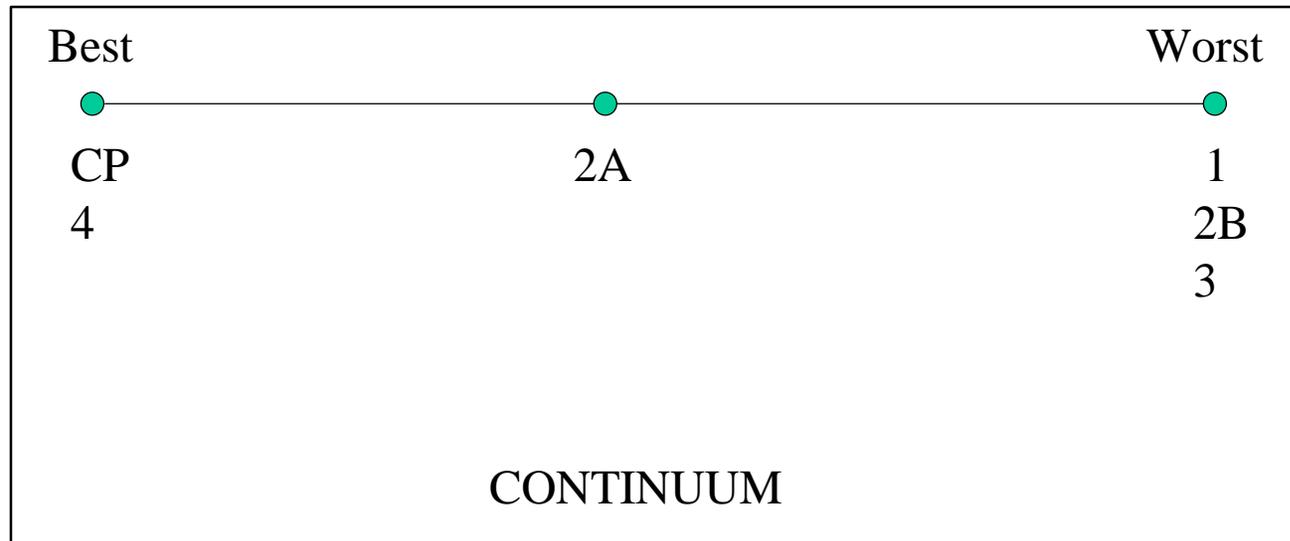
SECTION D ALTERNATIVES EVALUATION: PROPERTY RIGHTS

Evaluation of Section “D” Alternatives Issue Category: Property Rights

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2A	2B	3	4
A1	4	1	2	1	1	4
A2	4	1	2	1	1	4
A3	4	1	2	1	1	4
Score	12	3	6	3	3	12

1 Scale of 1 to 4 where 1 is worst and 4 is best

2 Best possible score is 12



ATTACHMENT H

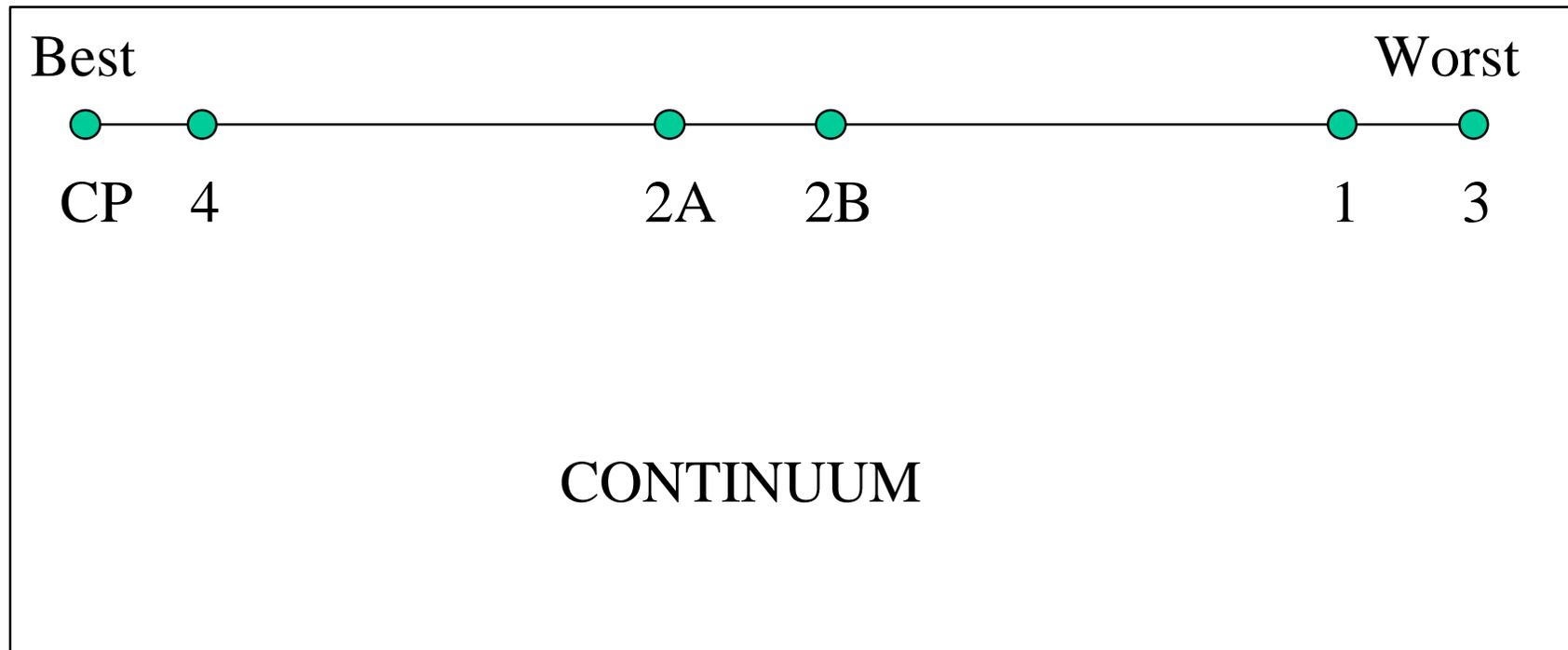
SECTION D ALTERNATIVES EVALUATION: LOCAL LAND USE POLICY

Evaluation of Section “D” Alternatives Issue Category: Local Land Use Policy

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2A	2B	3	4
D1	4	1	2	2	1	4
D2	1	1	1	1	1	1
Score	5	2	3	3	2	5

1 Scale of 1 to 4 where 1 is worst and 4 is best

2 Total possible score is 8



ATTACHMENT I

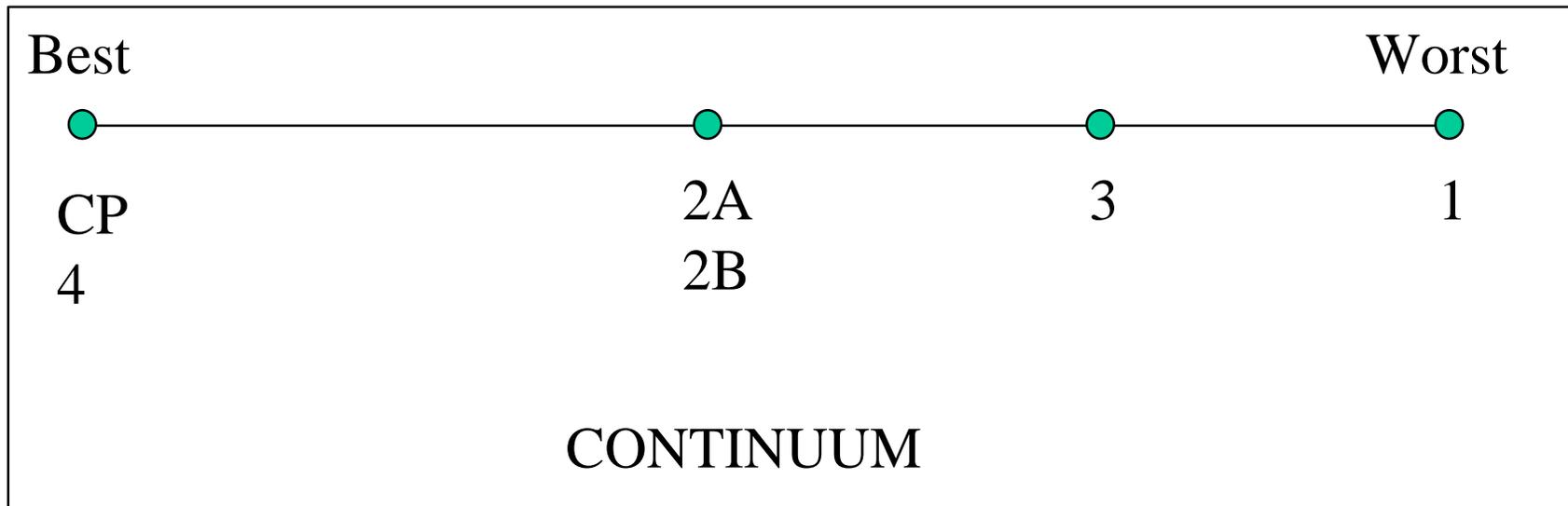
SECTION D ALTERNATIVES EVALUATION: ECONOMIC SUSTAINABILITY

Evaluation of Section “D” Alternatives

Issue Category: Economic Sustainability

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2A	2B	3	4
I1	4	1	2	2	2	4
I2	4	1	2	2	1	4
I3	2	2	2	2	2	2
I4	4	1	2	2	1	4
I5	4	1	2	2	1	4
I6	4	1	2	2	1	4
I7	4	1	2	2	1	4
Score	26	8	14	14	9	26

- 1 Scale of 1 to 4 where 1 is worst and 4 is best
- 2 Best possible score is 28



ATTACHMENT J

SECTION D ALTERNATIVES EVALUATION: REGULATORY EFFICIENCY AND EFFECTIVENESS

Best

Worst



ALL

CONTINUUM

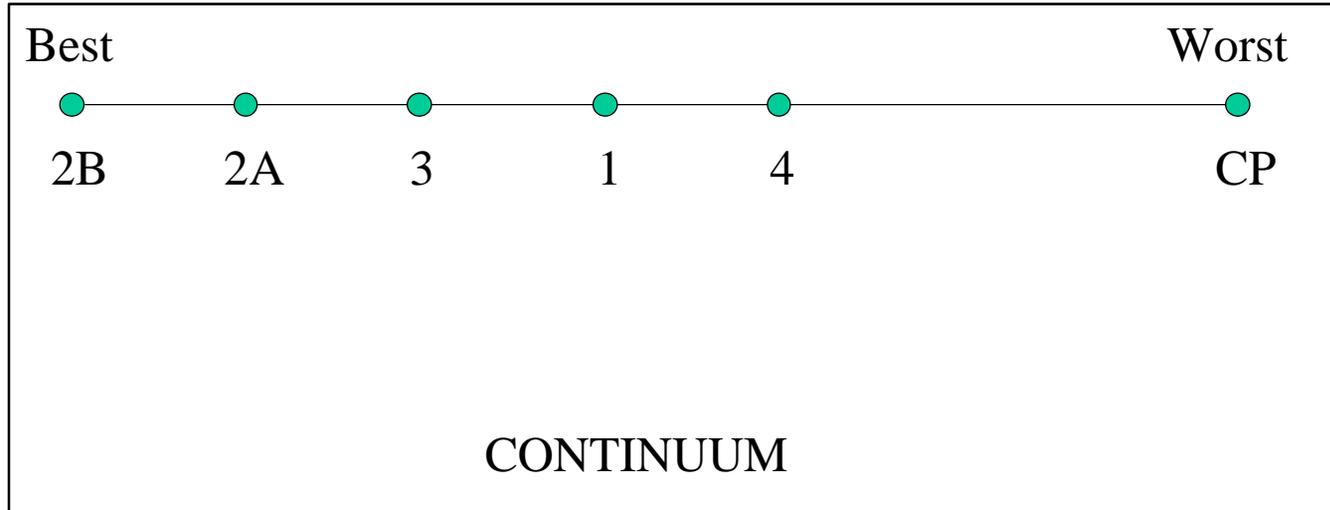
ATTACHMENT K

SECTION D ALTERNATIVES EVALUATION: AVOIDANCE OF WETLAND IMPACTS

Evaluation of Section “D” Alternatives Issue Category: Avoidance of Wetland Impacts

Evaluation Factors	Alternatives					
	Comp Plan	1	2A	2B	3	4
F1	3.1	1.9	1.5	1.4	1.6	1.9
F2	0.5/2.6/0.0	0.1/1.8/0.0	0.1/1.4/0.0	0.0/1.4/0.0	0.0/1.6/0.0	0.1/1.8/0.0

Note: See interpretation in Attachment D of Meeting 7 Notes.



AVOIDANCE OF WETLAND IMPACTS

SECTION D ALTERNATIVE: COMP PLAN

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG	17,395	0.10	1,740	870H 870M
	INDUSTRIAL	573	0.30	172	172H
	PRESERVE EXISTING	178,560	0.00	0	0H
	PRESERVE PROPOSED	5,231	0.50	2,615	2,615M
	RURAL	13,765	0.15	2,065	2,065M
	URBAN	<u>242</u>	0.35	<u>85</u>	85L
	TOTAL	215,766		6,677	
	$\frac{6,677}{215,766} = .031 = 3.1$				
F2: FUNCTION "UNITS" AT RISK	<u>1,042H/ 5,550M/ 85L</u> 0.5 2.6 0.0				

SECTION "D" ALTERNATIVE: 1A

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG/PRESERVE	8,857	0.02	177	88H 89M
	GOLDEN G ESTATES	5,775	0.07	404	404M
	PRESERVE EXISTING	178,560	0.00	0	0H
	PRESERVE PROPOSED	22,189	0.15	3,328	3,328M
	URBAN/ INDUSTRIAL	<u>396</u>	0.30	<u>119</u>	119M
	TOTAL	215,777		4,028	
	$\frac{4,028}{215,777} = 1.9$				
F2: FUNCTION "UNITS" AT RISK	<u>88 H 3,821 M - L</u> 0.1 1.8 0.0				

SECTION "D" ALTERNATIVE: 2A

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG	11,407	0.02	228	114H 114M
	G.G. ESTATES (ZONE 2)	13,149	0.07	920	920M
	PRESERVE EXISTING	178,560	0.00	0	0H
	PRESERVE PROPOSED	11,432	0.15	1,715	1,715M
	RURAL	514	0.15	<u>77</u>	77M
	URBAN/ INDUSTRIAL	<u>716</u>	0.3	<u>215</u>	215M
	TOTAL	215,778		3,155	
	$\frac{3,155}{215,788} = 1.5$				
F2: FUNCTION "UNITS" AT RISK	$\frac{114H \ 3,041M \ 0L}{0.1 \ 1.4 \ 0.0}$				

SECTION "D" ALTERNATIVE: 2B

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG	10,417	0.02	208	104H 104M
	AG(BCACSC)	1,147	0.00	0	H
	G.G.ESTATES	13,149	0.07	920	920M
	PRESERVE EXISTING	178,560	0.00	0	0H
	PRESERVE PROPOSED	11,277	0.15	1,692	1,692M
	RURAL	514	0.15	77	77M
	URBAN/ INDUSTRIAL	<u>715</u>	0.3	<u>215</u>	215M
	TOTAL	215,779		3,112	
	$\frac{3,112}{215,779} = 1.4$				
F2: FUNCTION "UNITS" AT RISK	<u>104H 3,008M 0L</u> 0.0 1.4 0.0				

SECTION "D" ALTERNATIVE: 3

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG	12,175	0.01	122	61H 61M
	G.G.ESTATES	5,505	0.07	385	385M
	INDUSTRIAL	369	0.30	111	111M
	PRESERVE EXISTING	178,560	0.00	0	0
	PRESERVE PROPOSED	18,821	0.15	2,823	2,823M
	URBAN	<u>347</u>	0.30	<u>104</u>	104M
		215M		3,545	
	$\frac{3,545}{215,777} = 1.6$				
F2: FUNCTION "UNITS" AT RISK	$\frac{61H \ 3,484M \ 0L}{0.0 \ 1.6 \ 0.0}$				

SECTION "D" ALTERNATIVE: 4

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG	12,816	0.02	256	128H 128M
	EXISTING PRESERVE	178,560	0	0	0
	PROPOSED PRESERVE	10,184	0.15	1,527	1,527M
	RURAL RESIDENTIAL	13,246	0.15	1,987	1,987M
	URBAN/ INDUSTRIAL	<u>972</u>	0.30	<u>292</u>	292M
	TOTAL	215,778		4,062	
	$\frac{4,062}{215,778} = 1.9$				
F2: FUNCTION "UNITS" AT RISK	<u>128H 3,937M 0L</u> 0.1H / 1.8M / 0.0L				

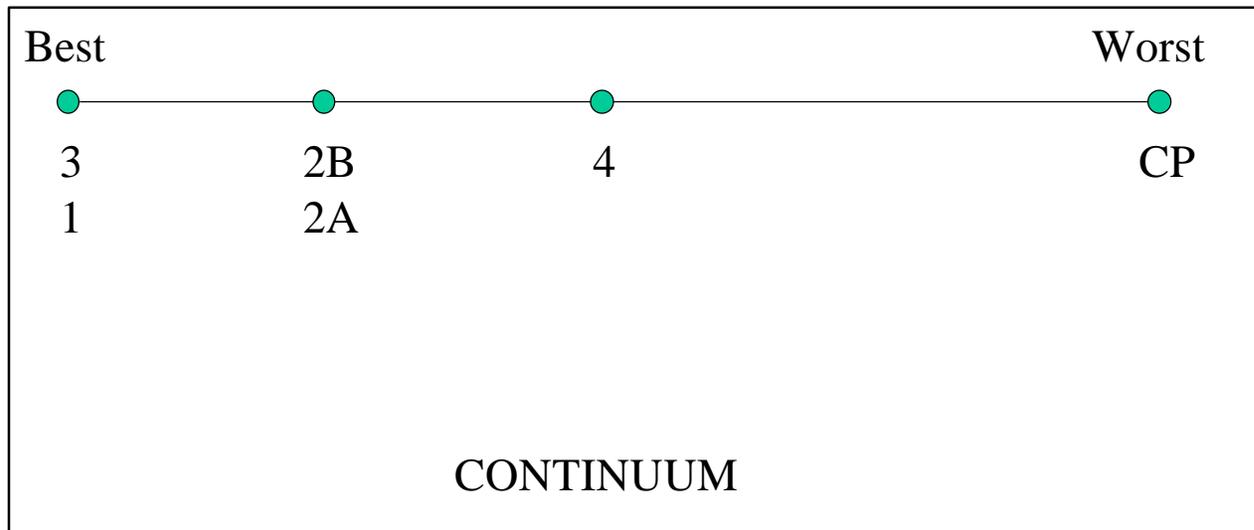
ATTACHMENT L

SECTION D ALTERNATIVES EVALUATION: MITIGATION

Evaluation of Section “D” Alternatives

Issue Category: Mitigation

Evaluation Factors	Alternatives					
	Comp Plan	1	2A	2B	3	4
J1 ¹	0.8	5.5	3.6	3.6	5.3	2.5
J2 ²	0.7	5.4	1.7	3.7	5.4	2.5



SECTION "D" ALTERNATIVE: COMPREHENSIVE PLAN

J1	AREA
	PROPOSED PRESERVE ACRES FROM F1 = $\frac{5,231}{6,677} = 0.8$
	TOTAL ACRES AT RISK 6,677
J2	FUNCTION WITHIN PRESERVE
	PROPOSED PRESERVE = 5,231 X M = 5,231M
	$\frac{5,231}{215,766} * 100 = 2.4$
	OH / 2.4M / 0L $\frac{x1}{0} + \frac{x2}{4.8} + \frac{x3}{0} = 4.8$
	F2: 0.5 / 2.6 / 0 $\frac{x3}{1.5} + \frac{x2}{5.2} + \frac{x1}{0} = 6.7$
	$\frac{4.8}{6.7} = 0.7$

SECTION "D" ALTERNATIVE: 1A

J1	AREA
	PROPOSED PRESERVE FROM F1 = $\frac{22,189}{4,028} = 5.05$
	TOTAL ACRES AT RISK 4,028
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE 22,189 X M / $\frac{215,777}{4,028} * 100 = 10.3$
	TOTAL WETLANDS
	OH / 10.5M / 0L $\frac{x1}{0} + \frac{x2}{21} + \frac{x3}{0} = 21$
	FROM F2: 0.1 / 1.8 / 0 $\frac{x3}{0.3} + \frac{x2}{3.6} + \frac{x1}{0} = 3.9$
	$\frac{21}{3.9} = 5.4$

SECTION "D" ALTERNATIVE: 2A

J1	AREA
	<u>PROPOSED PRESERVE FROM F1</u> = <u>11,432</u> = 3.6
	TOTAL ACRES AT RISK = 3,155
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE: $11,432 \times M / \underline{215,778} * 100 = 5.3$
	TOTAL WETLANDS
	OH / 5.3M / OL
	<u>X1</u> <u>x2</u> <u>x3</u>
	0 10.6 0 = 10.6
	F2: 0.1 1.4 0
	<u>x3</u> <u>x2</u> <u>x1</u>
	.3 + 2.8 + 0 = 3.1
	$\frac{5.3}{3.1} = 1.7$

SECTION "D" ALTERNATIVE: 2B

J1	AREA
	<u>PROPOSED PRESERVE FROM F1</u> = <u>11,277</u> = 3.6
	TOTAL ACRES AT RISK = 3,112
J2	FUNCTION AVAILABLE
	PROPOSED PRESERVE $11,277 \times M / \underline{215,779} * 100 = 5.2$
	TOTAL WETLANDS
	OH/ 5.2M / OL
	<u>x1</u> <u>x2</u> <u>x3</u>
	0 + 10.4 + 0 = 10.4
	F2: 0 1.4 0
	<u>x3</u> <u>x2</u> <u>x1</u>
	0 + 2.8 + 0 = 2.8

	$\frac{10.4}{2.8} = 3.7$
--	--------------------------

SECTION "D" ALTERNATIVE: 3

J1	AREA
	$\frac{\text{PROPOSED PRESERVE FROM F1}}{\text{TOTAL ACRES AT RISK}} = \frac{18,821}{3,545} = 5.3$
J2	FUNCTION IN NONPUBLIC LAND
	$\frac{\text{PROPOSED PRESERVE}}{\text{TOTAL WETLANDS}} = \frac{18,821 \times M}{215,777} * 100 = 8.7$
	OH / 8.7M / OL $\frac{x1}{0} + \frac{x2}{17.4} + \frac{x3}{0} = 17.4$
	F2: 0 / 1.6 / 0 $\frac{x3}{0} + \frac{x2}{3.2} + \frac{x1}{0} = 3.2$
	$\frac{17.4}{3.2} = 5.4$

SECTION "D" ALTERNATIVE: 4

J1	AREA
	$\frac{\text{PROPOSED PRESERVE FROM F1}}{\text{TOTAL ACRES AT RISK}} = \frac{10,184}{4,062} = 2.5$
J2	FUNCTION IN NONPUBLIC LAND
	$\frac{\text{PROPOSED PRESERVE}}{\text{TOTAL WETLANDS}} = \frac{10,184 \times M}{213,778} * 100 = 4.8$
	OH / 4.8M / OL $\frac{x1}{0} + \frac{x2}{9.6} + \frac{x3}{0} + \frac{x4}{9.6}$
	F2: 0.1 / 1.8 / 0 $\frac{x3}{0.3} + \frac{x2}{3.6} + \frac{x1}{0} = 3.9$

	$\frac{9.6}{3.9} = 2.5$

ATTACHMENT M

SECTION D ALTERNATIVES EVALUATION: ECOSYSTEM FUNCTION, WILDLIFE HABITAT, AND LISTED SPECIES

Evaluation of Section “D” Alternatives

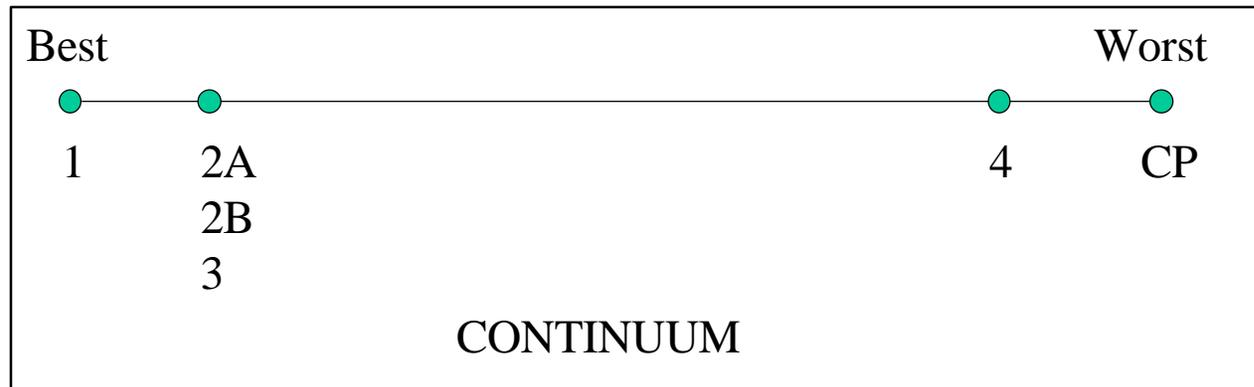
Issue Category: Ecosystem Function, Wildlife Habitat, and Listed Species

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2A	2B	3	4
B1	6	1	2	3	4	6
B2	5	*	3	4	1	6
B3	5	1	*	*	*	6
B4	6	1	3	2	4	5
B5	6	1	2	2	3	*
B6	6	*	*	*	*	*
B7	6	1	3	4	2	6
B8	6	1	3	3	2	6
B9	6	1	3	3	2	6
B10	5	*	2	2	1	6
B11	6	1	3	3	2	5
B12	6	*	2	2	2	5
Score	69	8	26	27	23	57

1 Scale of 1 to 6 where 1 is best and 6 is worst

2 Worst possible score is 72

* Alternative addressed the factor



ATTACHMENT N

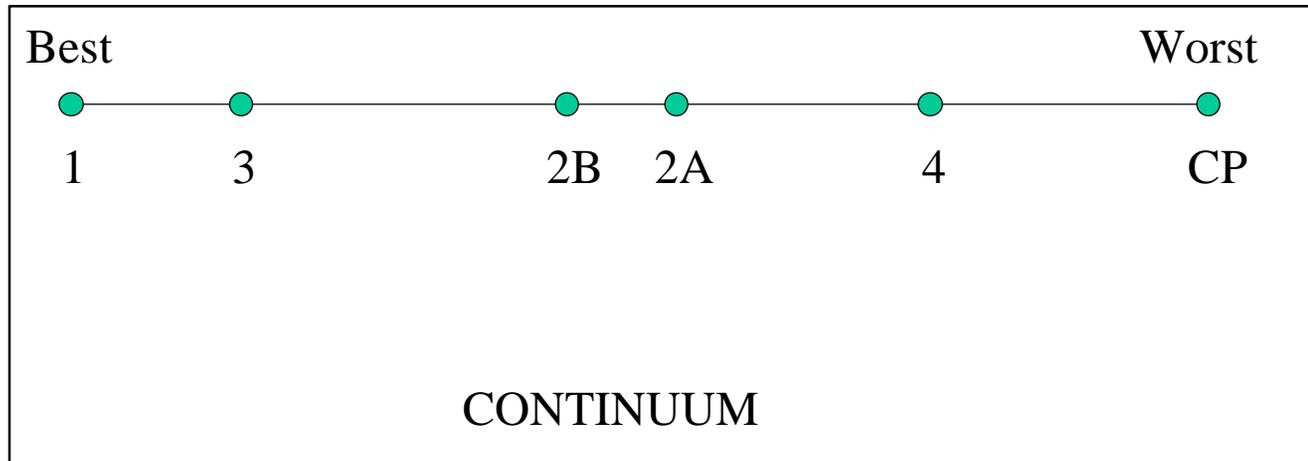
SECTION D ALTERNATIVES EVALUATION: CUMULATIVE AND SECONDARY IMPACTS

Evaluation of Section “D” Alternatives Issue Category: Cumulative Impacts

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2A	2B	3	4
E1	1	6	5	5	6	1
E2	5	4	2	2	6	1
E3	1	3	6	6	3	2
E4	1	3	6	6	3	2
E5	2	6	4	4	3	1
E6	-	-	-	-	-	-
E7	1	6	5	5	5	2
E8	1	6	4	4	5	2
E9	1	6	4	4	6	1
E10	2	6	4	4	6	1
Score	15	46	40	40	43	13

1 Scale of 1 to 6 where 1 is worst and 6 is best

2 Best possible score is 54



ATTACHMENT O

SECTION D ALTERNATIVES EVALUATION: PUBLIC LAND MANAGEMENT/USE

Best

Worst



1

2B

2A

3

4

CP

CONTINUUM

ALTERNATIVE	ASSESSMENT NOTES
COMP PLAN	<p>Lease compatible – identification of wetlands as environmentally sensitive areas instead of preserve</p> <p>Ag in north Belle Meade which can sensitive areas of wetlands & fish and wildlife habitat</p> <p>Industrial designation Ford Test Truck</p>
1A	<p>Less ag, shows parts of Golden Gate Estates (GGE) as preserve, helps panther refuge, Big Cypress Preserve</p> <p>SGGE management by improving hydrology</p> <p>Has Zone 2 criteria for GGE to protect Picayne Strand wetlands</p>
2A	<p>Next highest behind 2B because does not include (BCACSC) Criteria</p> <p>Has Zone 2 Criteria for GGE to protect Picayne Strand wetlands</p>
2B	<p>Next highest as same as 2A but does not exempt ag from Area of Critical State Concern (which limits clearing)</p>
3	<p>Next most ag behind comp plan and ALT 4</p>
4	<p>No Camp Kies Strand, CARL Proposal</p> <p>Includes Ford Test Track as industrial</p>

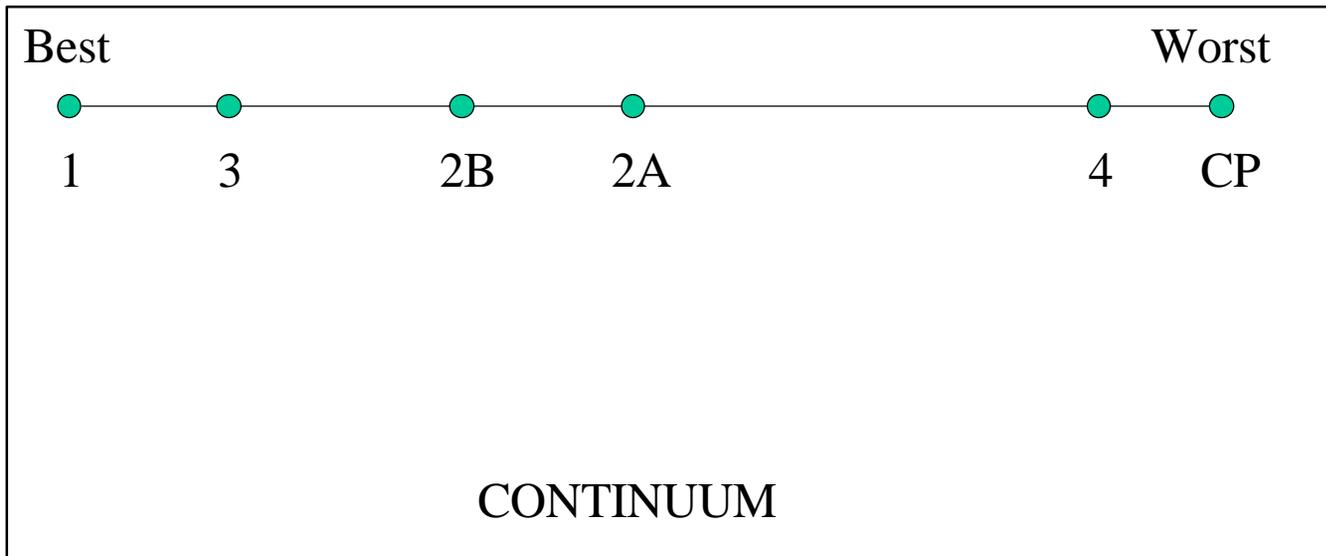
ATTACHMENT P

**SECTION D ALTERNATIVES EVALUATION:
WATER QUALITY**

Evaluation of Section “D” Alternatives Issue Category: Water Quality

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1A	2A	2B	3	4
H1	5	1	2	2	2	5
H2	5	1	3	3	1	5
H3	5	1	2	2	2	5
H4	5	2	2	1	2	5
H5	-	-	-	-	-	-
Score	20	5	9	8	7	20

- 1 Scale of 1 to 5 where 1 is best and 5 is worst
- 2 Worst possible score is 20



ATTACHMENT Q

HUB ALTERNATIVES EVALUATION: RESTORATION RETROFIT

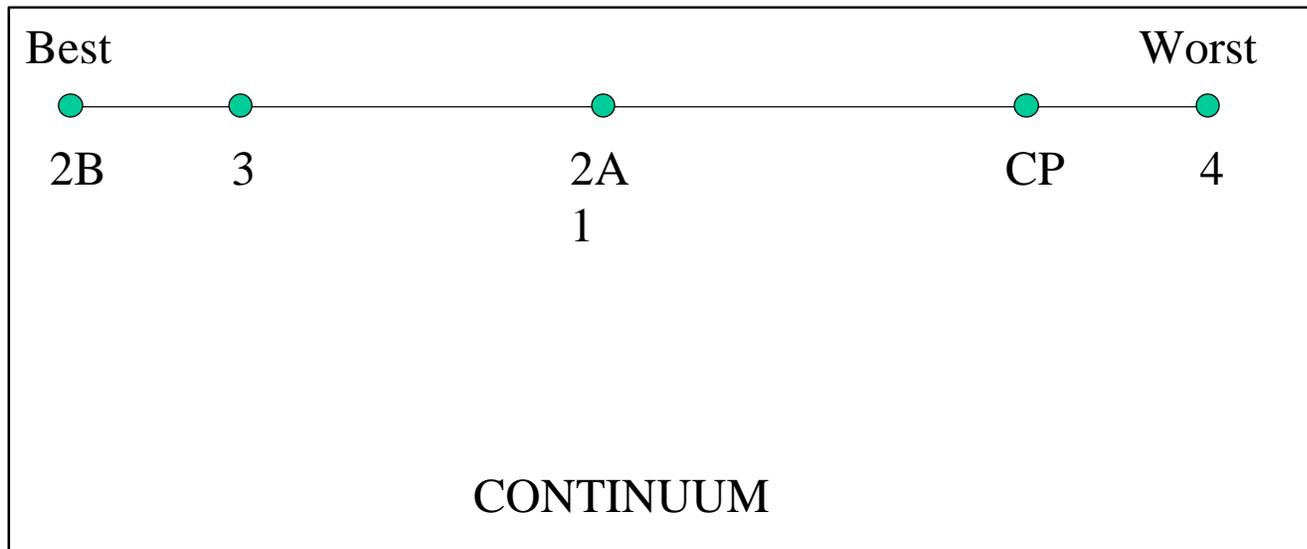
ATTACHMENT R

SECTION D ALTERNATIVES EVALUATION: WATER MANAGEMENT

Evaluation of Section “D” Alternatives Issue Category: Water Management

Evaluation Factors ¹	Alternatives					
	Comp Plan	1	2A	2B	3	4
G1	+	0	0	+	0	0
G2	+	0	0	0	0	0
G3	+	0	0	+	0	0
G4	0	++	+	++	++	0
G5	0	++	+	++	++	0
G6	0	+	++	++	++	0
G7	0	+	+	++	+	0
Score	3	6	5	10	7	0

1 Score represents the total numbers of (+) received by an alternative



ATTACHMENT S

GIS OUTPUT: SECTION A

ATTACHMENT T

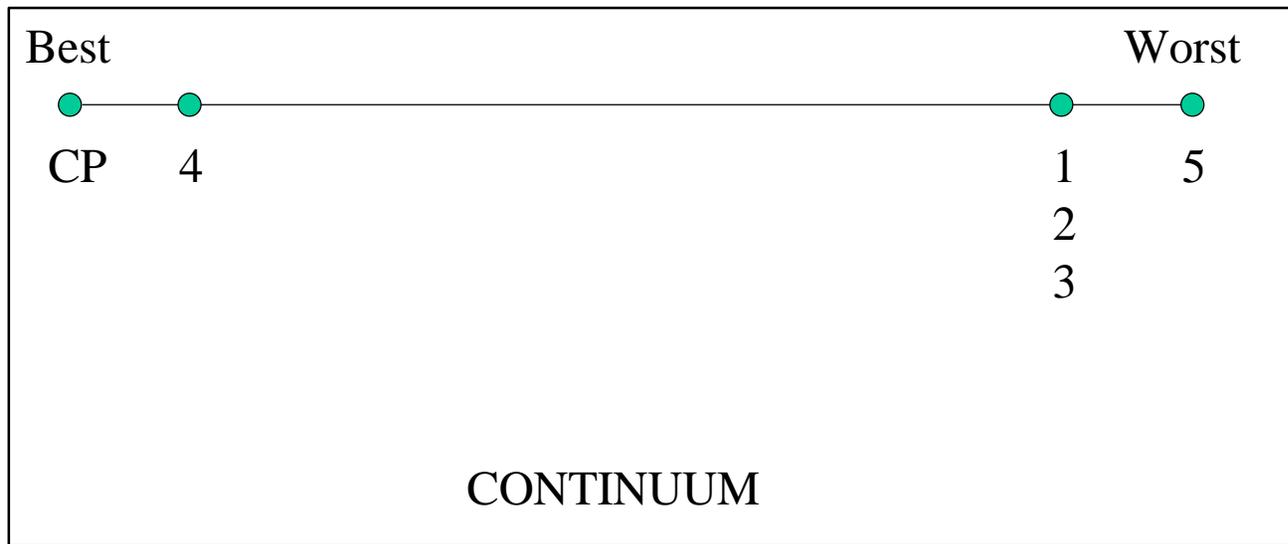
SECTION A ALTERNATIVES EVALUATION: PROPERTY RIGHTS

Evaluation of Section “A” Alternatives Issue Category: Property Rights

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2	3	4	5
A ¹	4	1	1	1	3	0
A ²	4	1	1	1	3	0
A ³	4	1	1	1	3	0
Score	12	3	3	3	9	0

1 Scale of 1 to 4 where 1 is worst and 4 is best

2 Best possible score is 12



ATTACHMENT U

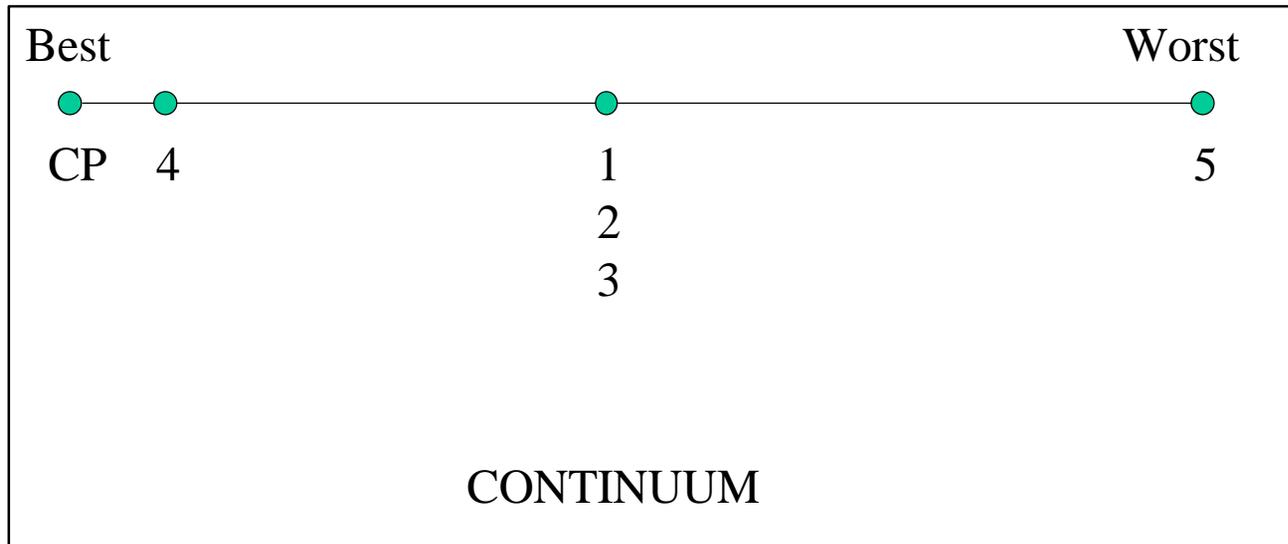
SECTION A ALTERNATIVES EVALUATION: LOCAL LAND USE POLICY

Evaluation of Section “A” Alternatives

Issue Category: Local Land Use Policy

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2	3	4	5
D1	4	1	1	1	3	0
D2	2	2	2	2	2	2
Score	6	3	3	3	5	2

- 1 Scale of 1 to 4 where 1 is worst and 4 is best
- 2 Total possible score is 8



ATTACHMENT V

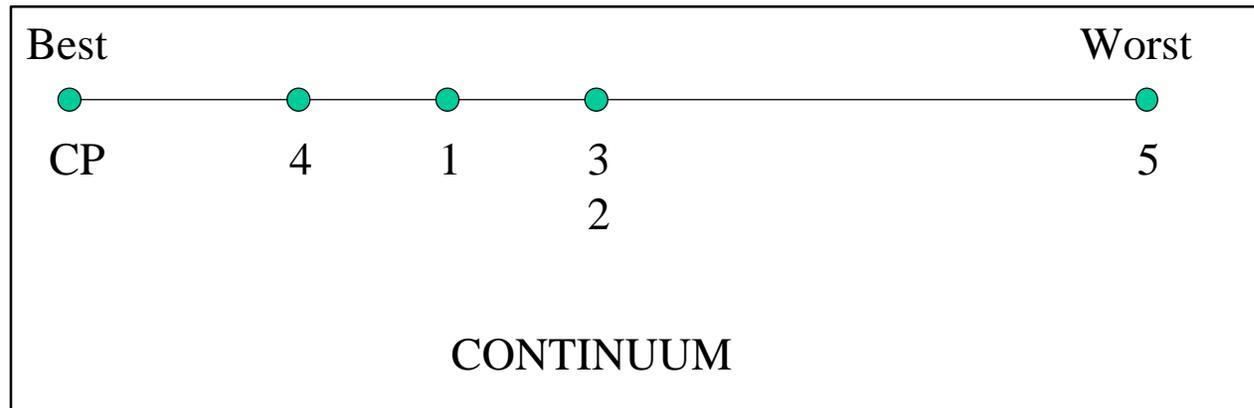
SECTION A ALTERNATIVES EVALUATION: ECONOMIC SUSTAINABILITY

Evaluation of Section “A” Alternatives Issue Category: Economic Sustainability

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2	3	4	5
I1	4	1	1	0	3	0
I2	4	1	1	2	3	0
I3	2	2	2	2	2	2
I4	4	2	1	1	3	0
I5	4	2	1	1	3	0
I6	4	2	1	1	3	0
I7	2	2	2	2	2	2
Score	24	12	9	9	19	4

1 Scale of 1 to 4 where 1 is worst and 4 is best

2 Total possible score is 28



ATTACHMENT W

SECTION A ALTERNATIVES EVALUATION: REGULATORY EFFICIENCY AND EFFECTIVENESS

Best

Worst



ALL

CONTINUUM

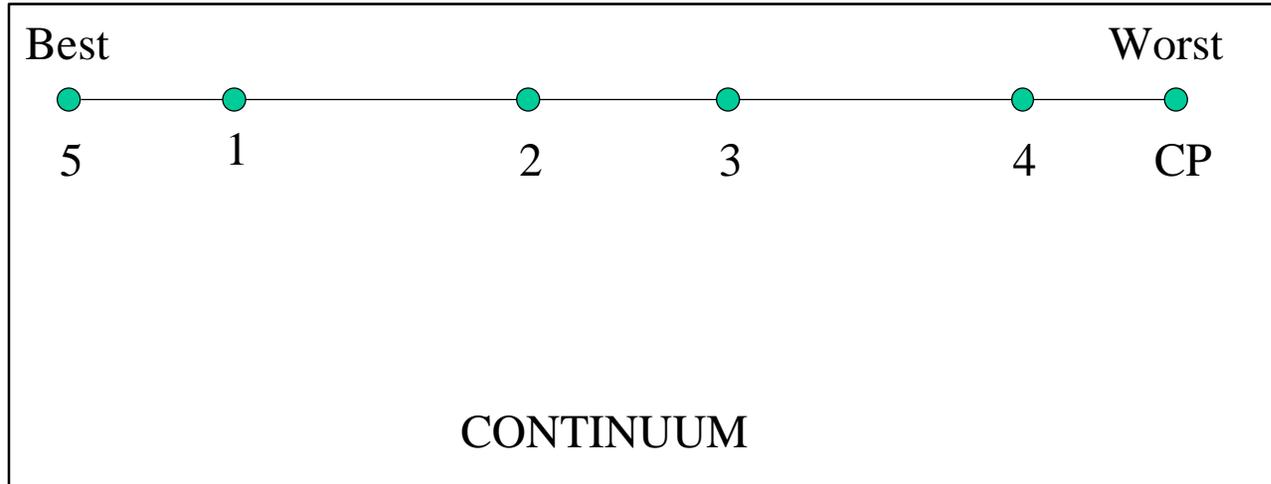
ATTACHMENT X

SECTION A ALTERNATIVES EVALUATION: AVOIDANCE OF WETLAND IMPACTS

Evaluation of Section “A” Alternatives Issue Category: Avoidance of Wetland Impacts

Evaluation Factors	Alternatives					
	Comp Plan	1	2	3	4	5
F1	18.9	15.9	16.9	17.3	17.8	13.3
F2	5.7/3.5/9.7	5.6/1.3/9.0	6.9/2.7/7.3	6.0/2.5/8.8	5.8/2.2/9.8	1.6/2.5/9.2

Note: See interpretation in Attachment D of Meeting 7 Notes



AVOIDANCE OF WETLAND IMPACTS

SECTION "A" ALTERNATIVE: COMP PLAN

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AG	699	0.10	70	70M
	INDUSTRIAL	270	0.35	95	95L
TOTAL 18,147	PRESERVE EXISTING	14,000	0.10	1,400	1,400H
	PRESERVE PROPOSED	4,147	0.20	829	415H
	RURAL	4,246	0.15	637	637M
	URBAN	<u>8,695</u>	0.35	<u>3,043</u>	3,042L
	TOTAL	32,057		6,074	
	$\frac{6,074}{32,057} = 18.9$				
F2: FUNCTION "UNITS" AT RISK	<u>1,815H/ 1,121M/ 3,138L</u> 5.7 3.5 9.7				

SECTION "A" ALTERNATIVE: 1A

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AIRPORT	1,460	0.20	292	292H
TOTAL 14,882	CONSERVE EXISTING	14,000	0.10	1,400	1,400H
	CONSERVE PROPOSED	882	0.20	176	88H 88M
	RRR	3,212	0.00	0	0L (ADD 30%= 960 ACRES)
	RURAL	3,250	0.10	325	325M
	URBAN & INDUSTRIAL	<u>9,145</u>	0.35	<u>3,201</u>	3,201L
	TOTAL	31,949		5,076	
	<u>5,076</u> = 15.9 31,949				
F2: FUNCTION "UNITS" AT RISK	<u>1,780H/ 413M/ 2,883L</u> 5.6 1.3 9.0				

SECTION "A" ALTERNATIVE: 2

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AIRPORT	1,454	0.20	290	290H
	GREENWAY	534	0.00	0	0L
	LEHIGH ACRES	1,642	0.20	328	328L
TOTAL 19,204	PRESERVE EXISITING	14,000	0.10	1,400	1,400H 520H
	PRESERVE PROPOSED	5,204	0.20	1,040	520M
	RURAL	3,343	0.10	334	334M
	URBAN/ INDUSTRIAL	<u>5,773</u>	0.35	<u>2,021</u>	2,021L
	TOTAL	31,950		5,413	
	$\frac{5,413}{31,950} = 16.9$				
F2: FUNCTION "UNITS" AT RISK	<u>2,210H/ 854M/ 2,349L</u> 6.9 2.7 7.3				

SECTION "A" ALTERNATIVE: 3A

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AIRPORT MITIGATION	462	0.20	92	92H
	AIRPORT	1,568	0.20	314	314H
	ARF	2,211	0.00	0	0H
TOTAL 15,216	PRESERVE EXISTING	14,000	0.10	1,400	1,400H 121H
	PRESERVE PROPOSED	1,216	0.20	242	121M
	RURAL RESIDENT	4,439	0.15	666	666M
	URBAN/ INDUSTRIAL	<u>8,054</u>	0.35	<u>2,819</u>	2,819L
	TOTAL	31,950		5,533	
	$\frac{5,533}{31,950} = 17.3$				
F2: FUNCTION "UNITS" AT RISK	<u>1,927H/ 787M/ 2,819L</u> 6.0 2.5 8.8				

SECTION "A" ALTERNATIVE: 4

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AIRPORT	1,446	0.20	289	289H
TOTAL 15,751	PRESERVE EXISTING	14,000	0.10	1,400	1,400H 175H
	PRESERVE PROPOSED	1,751	0.20	350	175M
	REDEVELOP- MENT	2,325	0.00	0	0
	RURAL DEVELOPMENT	3,502	0.15	525	525M
	URBAN/ INDUSTRIAL	8,913	0.35	3,120	3,120L
	WATER STORAGE	<u>12</u>	0.00	<u>0</u>	<u>0</u>
	TOTAL	31,949		5,684	
	<u>5,684</u> = 17.8 31,949				
F2: FUNCTION "UNITS" AT RISK	<u>1,864H/ 700M/ 3,120L</u> 5.8 2.2 9.8				

SECTION "A" ALTERNATIVE: 5

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK =	ACRES AT RISK	QUALITY
	AIRPORT MITIGATION	462	0.20	92	92H
	AIRPORT	1,568	0.20	314	314H
	ARF	2,211	0.05	111	111L
TOTAL 15,216	PRESERVE EXISITING	14,000	0.00	0	0H 121H
	PRESERVE PROPOSED	1,216	0.20	0	121M
	RURAL RESIDENT	4,439	0.15	667	667M
	URBAN/ INDUSTRIAL	<u>8,054</u>	0.35	<u>2,819</u>	2,819L
	TOTAL	31,950		4,245	
	$\frac{4,245}{31,950} = 13.3$				
F2: FUNCTION "UNITS" AT RISK	<u>527H/ 788M/ 2,930L</u> 1.6 2.5 9.2				

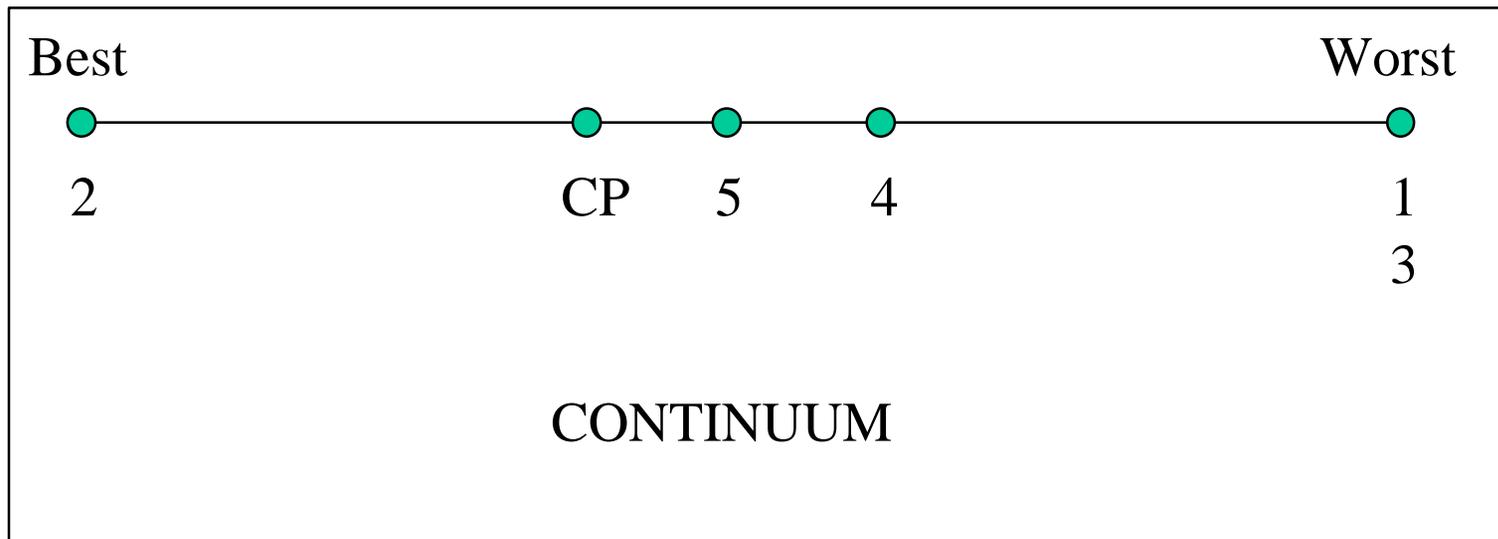
ATTACHMENT Y

SECTION A ALTERNATIVES EVALUATION: MITIGATION

Evaluation of Section “A” Alternatives Issue Category: Mitigation

Evaluation Factors	Alternatives					
	Comp Plan	1	2	3	4	5
J1	0.70	0.36	1.10	0.40	0.56	0.50
J2	0.80	0.40	1.20	0.40	0.60	0.70

Note: See interpretation in Attachment D of Meeting 7 Notes.



SECTION "A" ALTERNATIVE: COMPREHENSIVE PLAN

J1	AREA
	PROPOSED PRESERVE = $\frac{4,147}{6,074} = 0.7$
	TOTAL ACRES AT RISK = 6,074
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE = $\frac{4,147}{32,057} * 100 = 12.9M$
	TOTAL WETLANDS
	0H / 12.9M / 0L $\frac{x1}{0} + \frac{x2}{25.8} + \frac{x3}{0} = 25.8$
	F2: 5.7H / 3.5M / 9.7L $\frac{x3}{17.1} + \frac{x2}{7} + \frac{x1}{9.7} = 33.8$
	$\frac{25.8}{33.8} = 0.8$

SECTION "A" ALTERNATIVE: 1A

J1	AREA
	PROPOSED PRESERVE = $\frac{(882 + 960)}{5,076} = 0.36$
	TOTAL ACRES AT RISK = 5,076
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE = $\frac{882 + 960}{31,949} * 100 = 5.8M$
	TOTAL WETLANDS
	0H / 5.8M / 0L $\frac{x1}{0} + \frac{x2}{11.6} + \frac{x3}{0} = 11.6$
	FROM F2: 5.6H / 1.3M / 9.0L $\frac{x3}{16.8} + \frac{x2}{2.6} + \frac{x1}{9.0} = 28.4$
	$\frac{11.6}{28.4} = 0.4$

SECTION "A" ALTERNATIVE: 2

J1	AREA
	<u>PROPOSED PRESERVE</u> = 5,204 + 1,000 (GREENWAY) = 1.1
	TOTAL ACRES AT RISK = 5,413
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE: 6,204 / <u>31,950</u> * 100 = 19.4M
	TOTAL WETLANDS
	0H / 19.4 / 0L $\begin{array}{r} \underline{x1} \quad \underline{x2} \quad \underline{x3} \\ 0 + 38.8 + 0 = 38.8 \end{array}$
	F2: 6.9H 2.7M 7.3L $\begin{array}{r} \underline{x3} \quad \underline{x2} \quad \underline{x1} \\ 20.7 + 5.4 + 7.3 = 33.4 \end{array}$
	$\frac{38.8}{33.4} = 1.2$

SECTION "A" ALTERNATIVE: 3A

J1	AREA
	<u>PROPOSED PRESERVE</u> = 1,216 + 1,000 (AQUIRE/RESTORE/FIX) = 0.40
	TOTAL ACRES AT RISK = 5,533
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE 2,216 / <u>31,950</u> * 100 = 6.9M
	TOTAL WETLANDS
	0H / 6.9M / 0L $\begin{array}{r} \underline{x1} \quad \underline{x2} \quad \underline{x3} \\ 0 + 13.8 + 0 = 13.8 \end{array}$
	FROM F2: 6H 2.5M 8.8L $\begin{array}{r} \underline{x3} \quad \underline{x2} \quad \underline{x1} \\ 18 + 5.0 + 8.8 = 31.8 \end{array}$

	$\frac{13.8}{31.8} = 0.4$
--	---------------------------

SECTION "A" ALTERNATIVE: 4

J1	AREA
	<u>PROPOSED PRESERVE</u> = $1,715 + 1,000 + 500 = 0.56$
	TOTAL ACRES AT RISK = 5,684
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE = $3,215 / 31,949 * 100 = 10M$
	TOTAL WETLANDS
	0H / 10M / 0L $\begin{array}{r} \underline{x1} \quad \underline{x2} \quad \underline{x3} \\ 0 + 20 + 0 = 20 \end{array}$
	FROM F2: 5.8H / 2.2M / 9.8L $\begin{array}{r} \underline{x3} \quad \underline{x2} \quad \underline{x1} \\ 17.4 + 4.4 + 9.8 = 31.6 \end{array}$
	$\frac{20}{31.6} = 0.6$

SECTION "A" ALTERNATIVE: 5

J1	AREA
	<u>PROPOSED PRESERVE</u> = $1,210 + 1,600 (AQ/RESTORE/FIX) = 0.5$
	TOTAL ACRES AT RISK = 4,245
J2	FUNCTION IN NONPUBLIC LAND
	PROPOSED PRESERVE = $2,210 / 31,950 * 100 = 6.9$
	0H / 6.9M / 0L $\begin{array}{r} \underline{x1} \quad \underline{x2} \quad \underline{x3} \\ 0 + 13.8 + 0 = 13.8 \end{array}$
	FROM F2: 1.6H / 2.5M / 9.2L $\begin{array}{r} \underline{x3} \quad \underline{x2} \quad \underline{x1} \\ 4.8 + 5.0 + 9.2 = 19 \end{array}$
	$\frac{13.8}{19} = 0.7$

ATTACHMENT Z

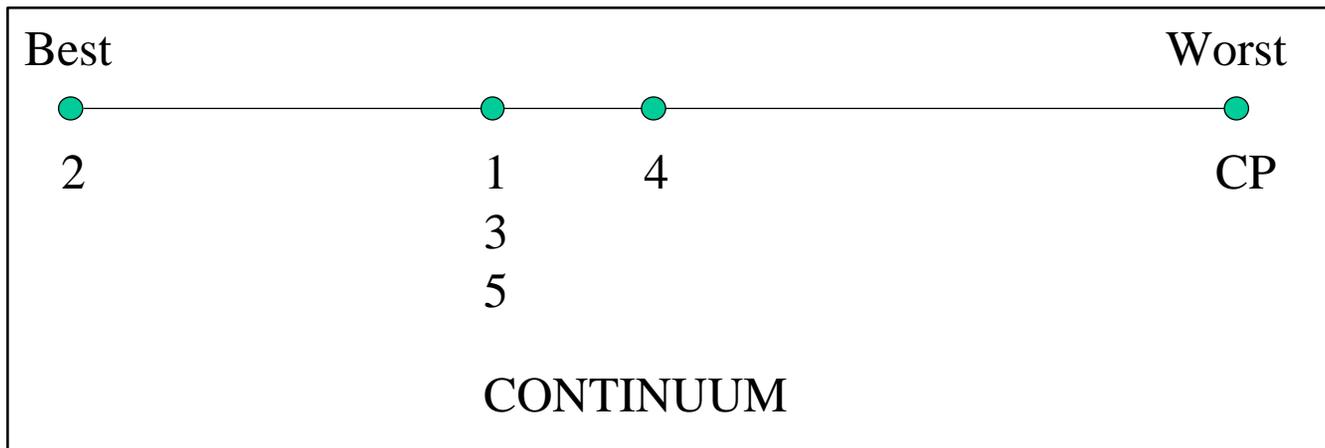
SECTION A ALTERNATIVES EVALUATION: ECOSYSTEM FUNCTION, WILDLIFE HABITAT, AND LISTED SPECIES

Evaluation of Section “A” Alternatives Issue Category: Ecosystem Function, Wildlife Habitat, and Listed Species

Evaluation Factors ^{1,2}	Alternatives					
	Comp Plan	1	2	3	4	5
B1	6	2	1	3	4	3
B2	4	2	1	3	6	3
B3	6	2	1	3	4	3
B4	6	3	1	5	2	4
B5	6	2	1	2	2	2
B6	2	2	1	2	2	2
B7	4	3	1	2	6	2
B8	6	2	1	3	4	3
B9	6	4	1	2	3	2
B10	6	2	1	3	4	3
B11	1	4	1	3	2	3
B12	3	2	1	3	3	3
Score	56	30	12	34	42	33

1 Alternatives ranked 1 through 6 where 1 is best and 6 is worst.

2 Worst possible score is 72



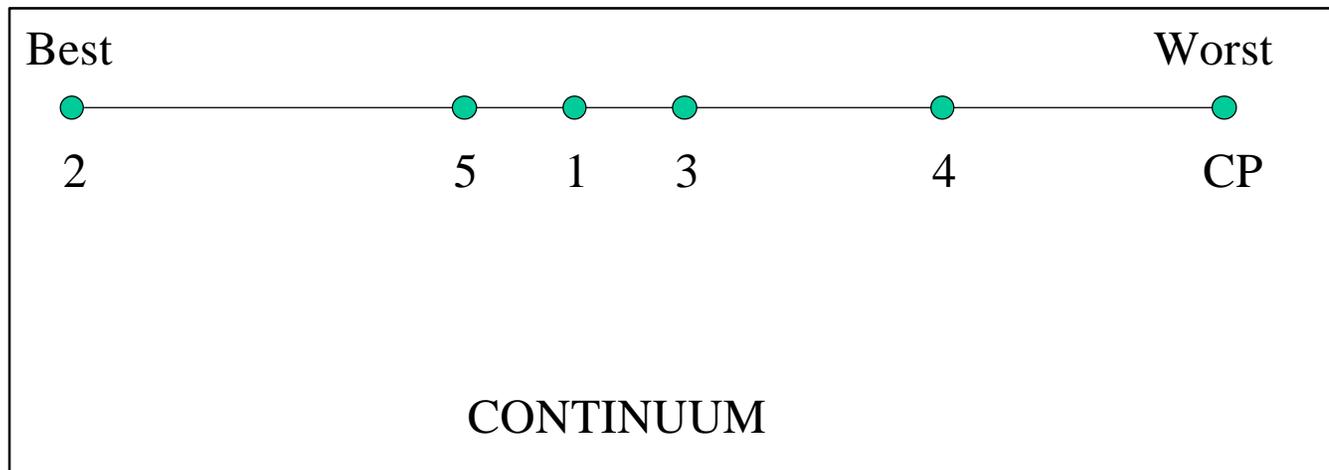
ATTACHMENT AA

SECTION A ALTERNATIVES EVALUATION: CUMULATIVE AND SECONDARY IMPACTS

Evaluation of Section “A” Alternatives Issue Category: Cumulative Impacts

Evaluation Factors ^{1,2,3}	Alternatives					
	Comp Plan	1	2	3	4	5
E1	6	3	1	4	2	4
E2	6	3	1	5	2	4
E3	6	3	1	5	2	4
E4	6	3	1	3	3	2
E5	6	3	1	4	2	4
E6	6	1	1	1	1	1
E7	4	5	1	2	6	2
E8	4	5	1	2	6	2
E9	6	3	1	3	3	2
E10	4	5	1	2	6	2
Score	54	29	10	31	33	27

- 1 Alternatives ranked 1 through 6 where 1 is best and 6 is worst
- 2 Worst possible score is 60



ATTACHMENT AB

SECTION A ALTERNATIVES EVALUATION: PUBLIC LAND MANAGEMENT/USE

Best

Worst



2

3

5

CP

1

4

CONTINUUM

ALTERNATIVE	ASSESSMENT NOTES
COMP PLAN	<p>Estero Area preserved</p> <p>More preserve than 1A and 4</p>
1A	<p>1A and 4 about the same. 1A misses some coastal areas at Punta Rassa</p>
2	<p>More preserve total (Estero Bay Buffer, tributaries to Estero Bay and 6-Mile Cypress)</p> <p>More preserves surrounded by rural in Hickey Creek area</p>
3A	<p>Estero Bay Area about the same as Comp</p> <p>Difference in amount of rural next to Hickey Creek area</p> <p>No criteria</p>
4	<p>1A and 4 about the same. 4 misses some connections from 6-Mile Cypress and Estero Bay Buffer</p>
5	<p>Estero Bay Area about the same as comp</p> <p>Difference in amount of rural next to Hickey Creek area</p> <p>Has more restrictive criteria for development</p>

ATTACHMENT AC

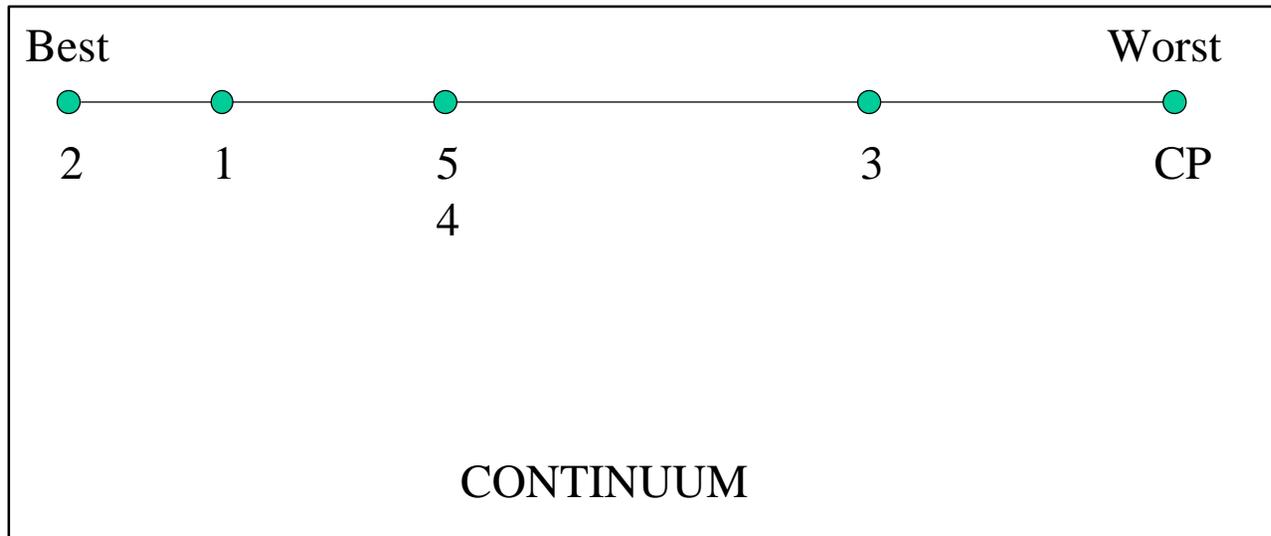
HUB ALTERNATIVES EVALUATION: WATER QUALITY

Evaluation of Section “A” Alternatives Issue Category: Water Quality

Evaluation Factors ¹	Alternatives					
	Comp Plan	1	2	3	4	5
H1	5	2	1	4	3	4
H2	5	2	1	4	2	4
H3	2	2	1	2	3	2
H4	4	3	1	3	4	2
H5	-	-	-	-	-	-
Score	16	9	4	13	12	12

1 Scale of 1 to 5 where 1 is best and 5 is worst

2 Worst possible score is 20.



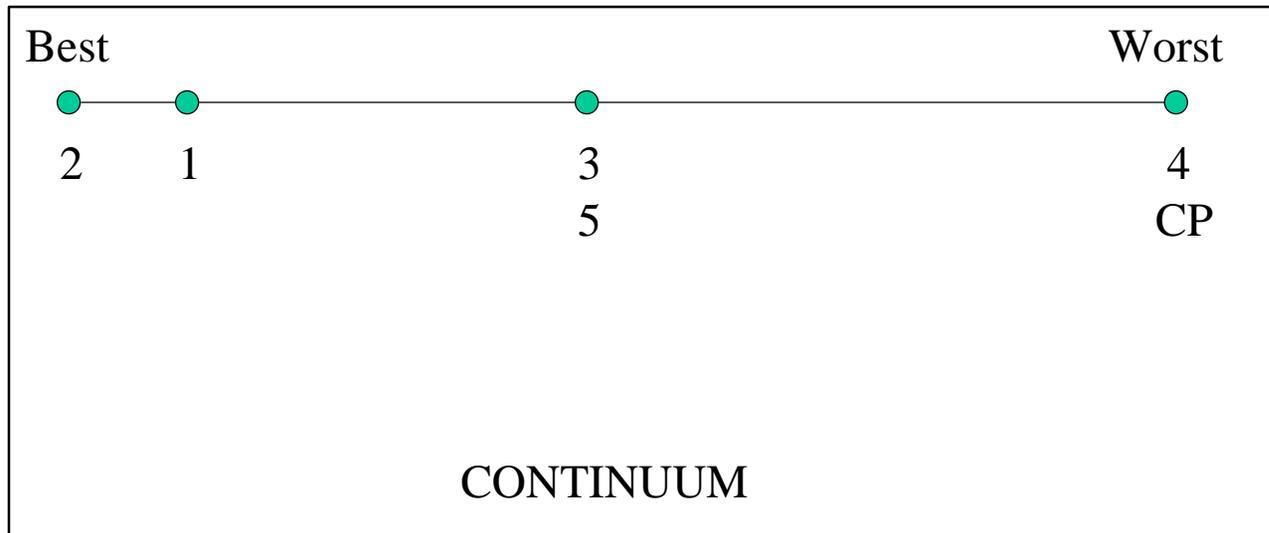
ATTACHMENT AD

HUB ALTERNATIVES EVALUATION: RESTORATION RETROFIT

Evaluation of Section “A” Alternatives Issue Category: Restoration/Retrofit

Evaluation Factors ¹	Alternatives					
	Comp Plan	1	2	3	4	5
K1	0	+	++	-+	0	-+
K2	0	0	0	0	0	0
K3	0	0	0	0	0	0
K4	0	0	0	0	0	0
K5	0	+	++	-+	0	-+
Score	0	2	4	1	0	1

1 Score represents the total number of (+) received by an alternative



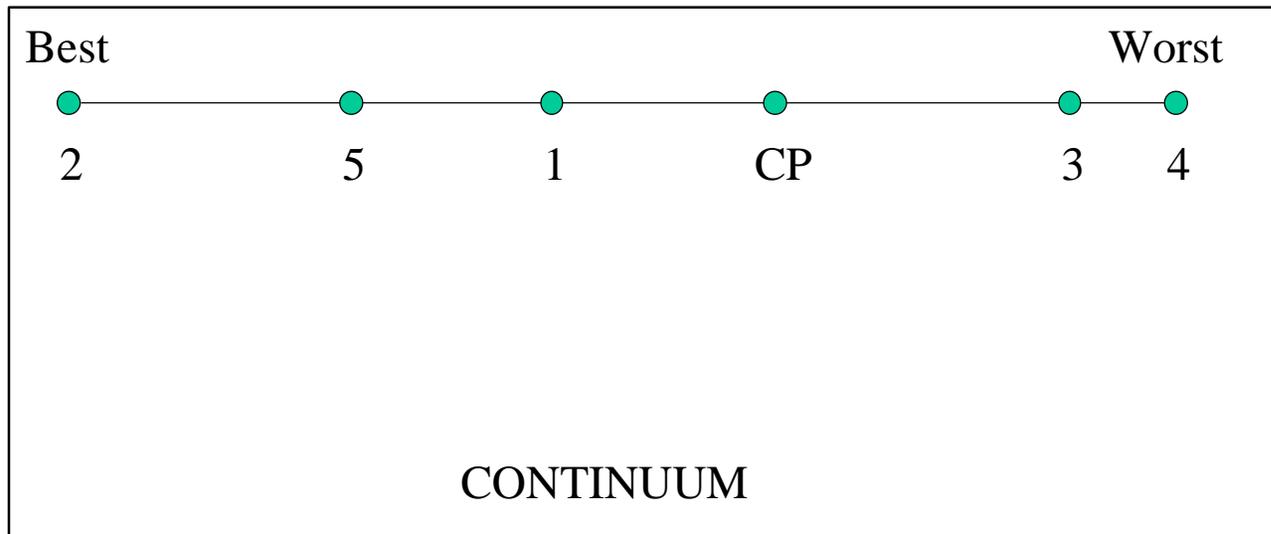
ATTACHMENT AE

SECTION A ALTERNATIVES EVALUATION: WATER MANAGEMENT

Evaluation of Section “A” Alternatives Issue Category: Water Management

Evaluation Factors ¹	Alternatives					
	Comp Plan	1	2	3	4	5
G1	+	+	+	0	0	0
G2	+	0	0	0	0	0
G3	+	0	0	0	0	0
G4	+	+	++	+	0	+ -
G5	0	+	++	+	+	+ -
G6	0	+	++	0	+	+
G7	0	+	++	+	0	+ -
Score	4	5	9	3	2	5.5

1 Score represents the total numbers of (+) received by an alternative



ATTACHMENT AF

REGULATORY EFFICIENCY AND EFFECTIVENESS: EVALUATION FACTORS REVISITED

- C1 LEVEL OF RESTRICTIONS ON LAND-USE LEGEND
- more criteria=more resource to review?
 - more criteria=more effective for protecting resource?
 - more criteria=more interpretation?
- C2 DEGREE COMMONALITY BETWEEN ALT & “CURRENT COMP PLAN/REGULATORY”
- (but is not “current” considered inefficient?)
- C2 DEGREE OF COMMONALITY BETWEEN ALTERNATIVES (does not help compare alternatives) (can be used post ADG analysis?)
- C2 PORTION OF MAP NET IDENTIFIED (all maps filled in = so are same)
- C2 DEGREE OF MITIGATION IDENTIFIED
- C3 POTENTIAL FOR SECTION 7 COORDINATION (REVIEW TIME/CONCERNS ADDRESSED)
- C3 WHAT SLOWS PERMITS?
- 1) applicant provide incomplete info
 - 2) sensitivity of resource impacted
 - most wetland impact (large conversion)=more controversial/slower?
 - area of priority 1 habitat that converts to urban=more sensitivity?
 - area of impact to EPA’s wetlands important to wetland species=triggers additional review
 - # rookeries/etc. not in preserve or agric=resource sensitivity
 - degree of difference between alt and resource friendly plan
 - more agric=less regulation
- C3 PROGRAM GLOBAL
- 1) effectiveness = meet federal mandates and charges (external)
 - c’s
 - meeting goal no net loss
 - consultation on species
 - jeopardy opinions
 - legal case load
 - meet EPA expectations
 - coordinate local and state
 - percent land removed from permitting process
 - 2) efficiency = meet in timely and cost effective manner (internal)
 - able do w/in staff and budget levels
 - seamlessness (staff allocation)

ATTACHMENT AG

BERM DESCRIPTION

WORST BERM

Berm in location as shown on 4B, which places (isolates) $\pm 4 \frac{1}{4}$ ($9 \frac{3}{4}$ if you construct berm to S.R.951) sections of regionally significant wetlands on west side of berm (decreases function for fish and wildlife habitat) and includes a north/south roadway.

BAD BERM

Berm in location as shown on 4B, which places (isolates) $\pm 4 \frac{1}{4}$ sections ($9 \frac{3}{4}$ if you construct berm to SR951) on west side of berm (decreases function for fish and wildlife habitat) and does not include a north/south roadway

GOOD BERM

- 1) berm in different location, where real existing development boundary is (i.e., west side of entire M & A ranch, west side of Stoneybrook wetlands preserves, west of Hubschman wetland preserves, west of CREW areas north and south of Bonita Beach Road, west of nice wonder properties)
- 2) No ditch on east side of berm
- 3) No road
- 4) Upfront multi-agency review of hydroperiod and critical fish and wildlife resources-assumed natural hydroperiods in CREW preserved hydroperiods not maintained for wellfield protection of flood protection. We have real doubts that an engineered berm will be operated in accordance with standards that protect natural resources
- 5) Re-connection of flowways by implementing new bridges or culverts where they should have been initially designed.

Note: A series of short, strategically placed berms (segmented) may accomplish same goal as one long berm.

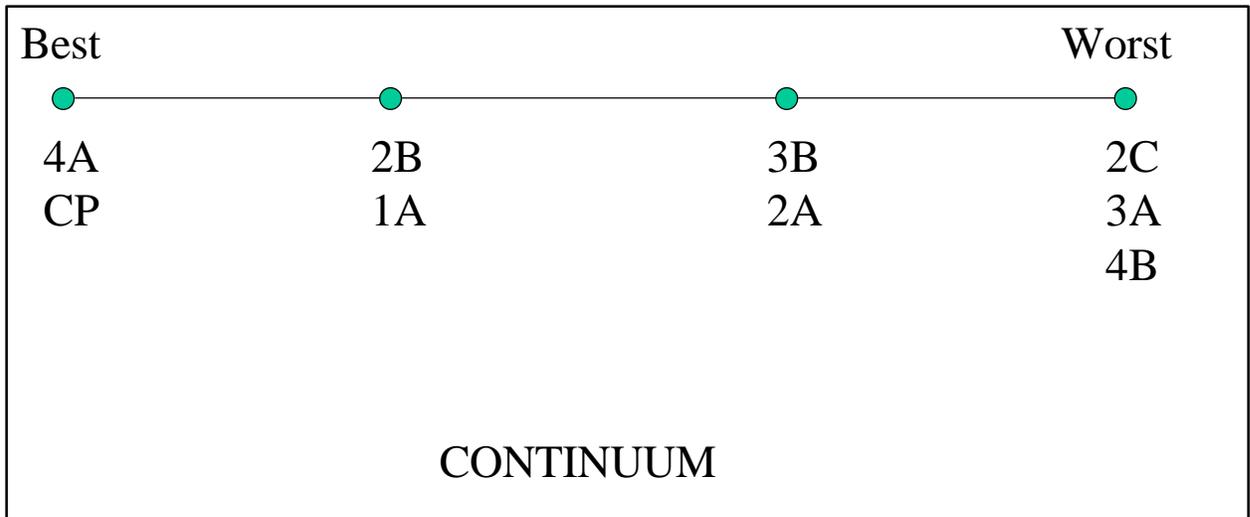
Note: If hydroperiod of sheetflow wetlands (i.e., seasonal ponded wetlands and hydric pine flatwoods) is not preserved on CREW area, no berm would be acceptable.

ATTACHMENT AH

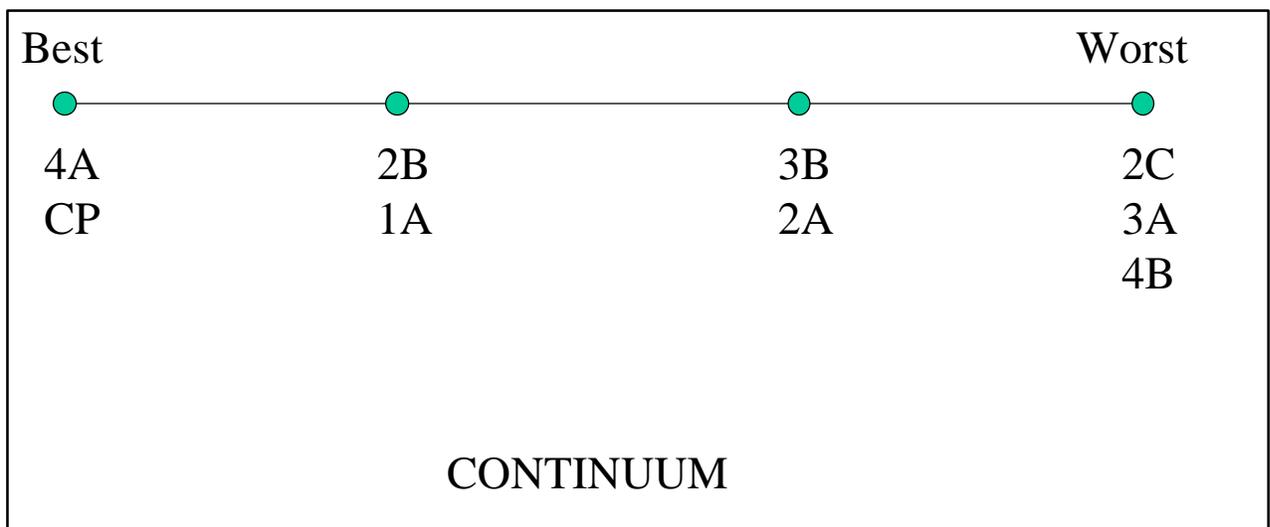
**SECTION B ALTERNATIVES
RE-EVALUATION**

PROPERTY RIGHTS

First Evaluation

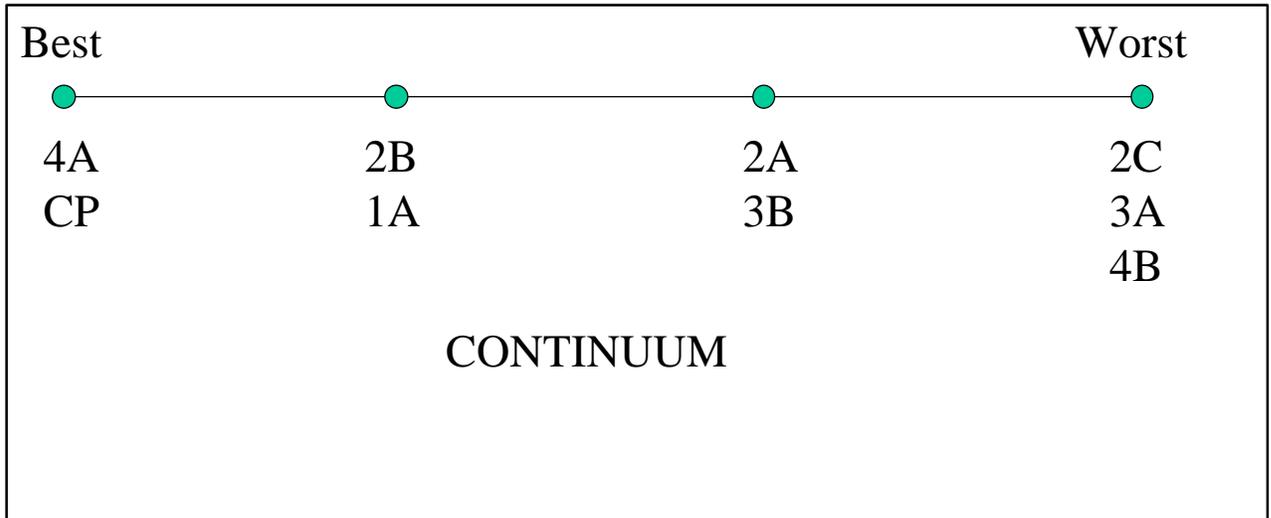


Second Evaluation

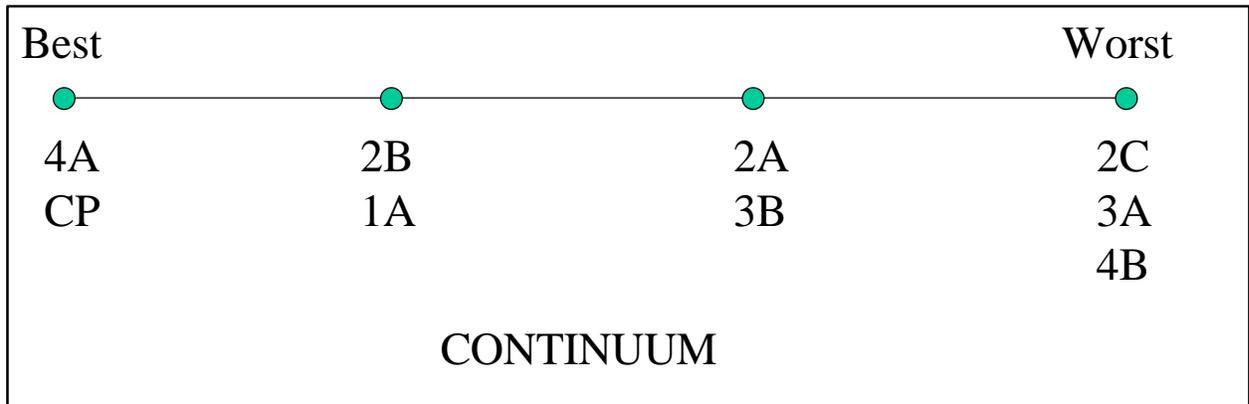


LOCAL LAND USE POLICY

First Evaluation



Second Evaluation



REGULATORY EFFICIENCY AND EFFECTIVENESS

	COMP	1A	2A	2B	2C	3A-5	3A-10	3B	4A	4B
ACRES @ RISK FROM F1	6.2	5.2	5.2	5.2	1.2	6.2	10.0	5.4	6.1	2.9
AREA PR1										
2X URBAN	0.0	4.7	8.6	2.7	3.5	9.5	9.5	8.9	7.7	10.0
	0.0	4.7	8.6	2.7	3.5	9.5	9.5	8.9	7.7	10.0
AGRIC	8.6	7.3	4.0	0.55	0.0	0.0	0.0	1.5	10.0	0.0
EPA WETLANDS										
2X URBAN	0.0	0.6	10.0	0.43	0.52	0.0	0.0	0.62	0.9	1.2
	0.0	0.6	10.0	0.43	0.52	0.0	0.0	0.62	0.9	1.2
AGRIC	3.2	1.6	10.0	1.7	0.0	0.0	0.0	1.4	3.0	0.0
TOTAL	18.0	24.7	56.4	13.71	9.24	25.2	29.0	27.34	36.3	25.3

REGULATORY EFFICIENCY AND EFFECTIVENESS (continued)

FACTORS	ALTERNATIVES								
	CP	1A	2A	2B	2C	3A	3B	4A	4B
Acres @ Risk	5600	4650	4620	4700	1082	(5%) 5534 – (10%) 8967 –	4840	5500	2600
Index	6.2	5.2	5.2	5.2	1.2	(5%) – 6.2 (10%) 10.0	5.4	6.1	2.9
Panther Habitat									
Urban	0	1169	2130	674	884	2361	2209	1917	2491
Index	0	4.7	8.6	2.7	3.5	9.5	8.9	7.7	10.0
Agric	5831	4916	2666	371	0	0	987	6744	0
Index	8.6	7.3	4.0	0.55	0	0	1.5	10.0	0
EPA Wetland									
Urban	0 ^a	2251	35711	1522	1851	3666	2228	3175	4358
Index	0	0.6	10.0	0.43	0.52	0	0.62	0.9	1.2
Agric	14365	7213	45530	7686	0	0	6500	13772	0
Index	3.2	1.6	10.0	1.7	0	0	1.4	3.0	0
Woodstork Rookeries ^b	0	0	0	0	0	0	0	0	0
Wading Bird Sightings ^b	18 ^c	5	1	5	5	5	5	6	5
Wading Bird Rookeries ^b	3 ^c	4	0	4	0	0	4	5	4
Panther Sights ^b	9 ^c	0	3	0	2	2	2	3	4
Kite Roost ^b	0	0	0	0	0	0	0	0	0
Scrubjay location ^b	Not listed	6	0	3	4	5	0	4	5
Bald Eagle Nest ^b	4 ^c	4	0	0	4	4	1	3	1
Acres of Ag	85,873	63,956	51,510	62,729	68,957 ^d	68,957 ^d	50,372	78,626	68,957 ^d

^aAssumed no EPA wetlands in urban-but probably some are

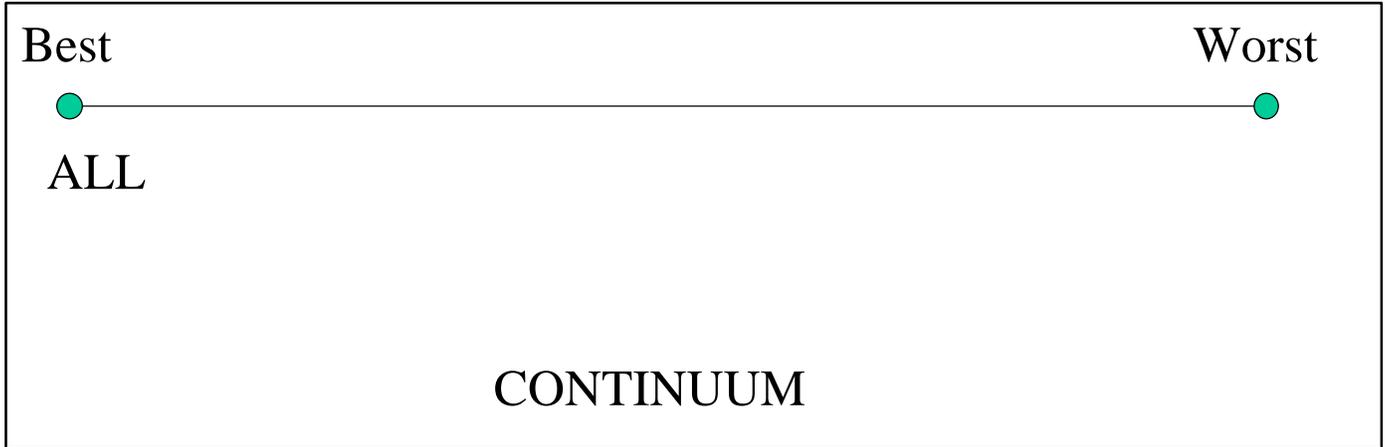
^bNumber not in preserve or agriculture

^cIncludes agriculture but split out in table

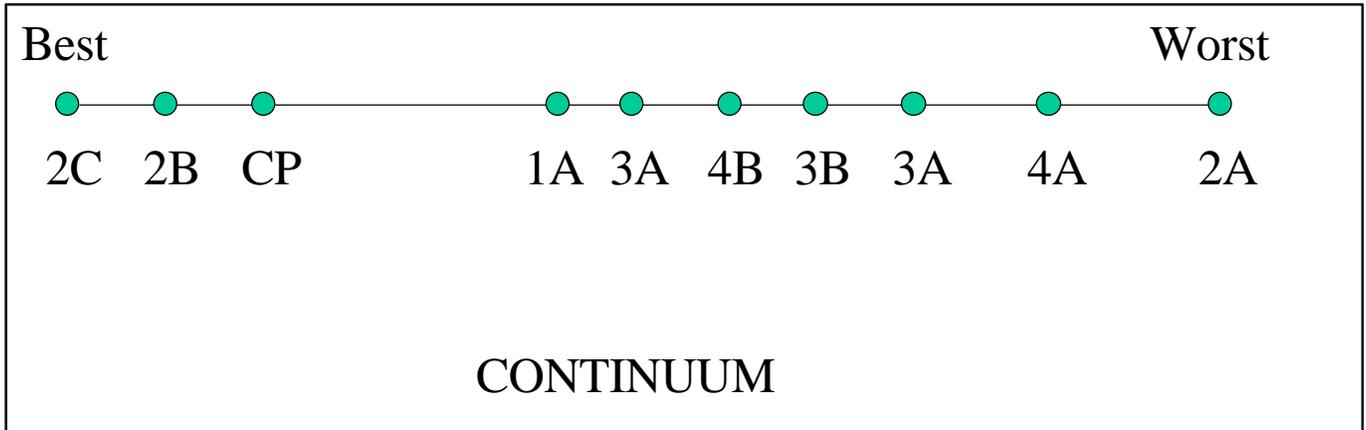
^dFor CRPA, use 68,957 acres of current land use in agriculture

REGULATORY EFFICIENCY AND EFFECTIVENESS (continued)

First Evaluation



Second Evaluation



AVOIDANCE OF WETLANDS IMPACTS

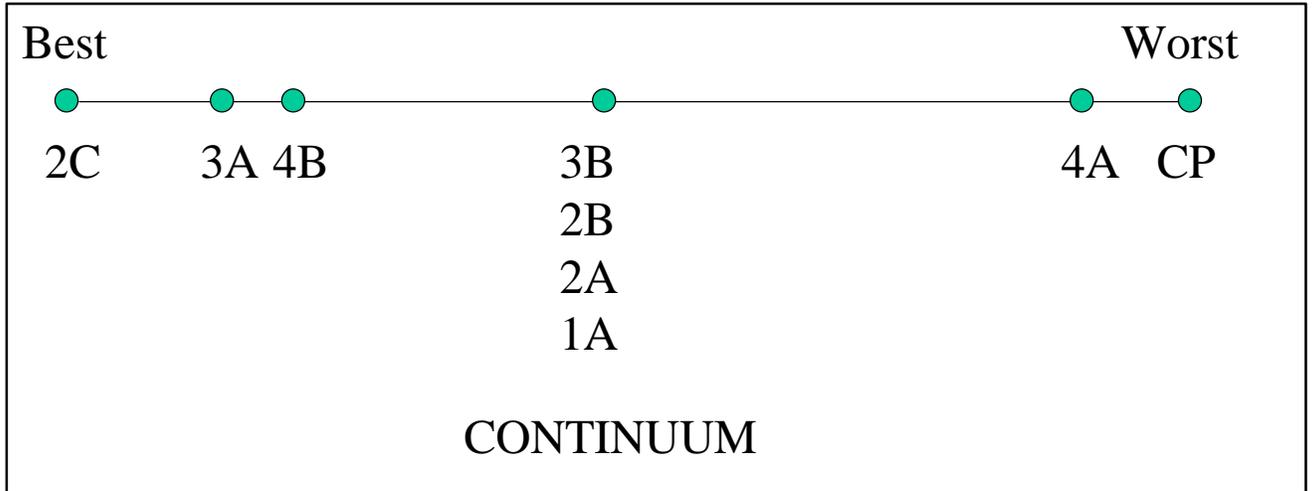
HUB ALTERNATIVE 3A

F1: ACRES AT RISK	LEGEND	ACRES OF WETLANDS	X RISK	ACRES AT RISK (0%)	ACRES AT RISK 5%	ACRES AT RISK 10%
	CRPA	68,667	0.10 @ 10%	0	3,434	6,867
	BUFFER		0.0		0	0
	URBAN	<u>6,240</u>	0.35	<u>2,100</u>	<u>2,100</u>	<u>2,100</u>
		76,000		2,100	5,534	8,967
				$\div 76,000$	$\div 76,000$	$\div 76,000$
			INDEX =	2.8	7.3	11.8
F2: FUNCTION "UNITS" AT RISK	CRPA BUFFER URBAN					
			INDEX	0/0/2.8	0/9.0/2.8	0/4.5/2.8

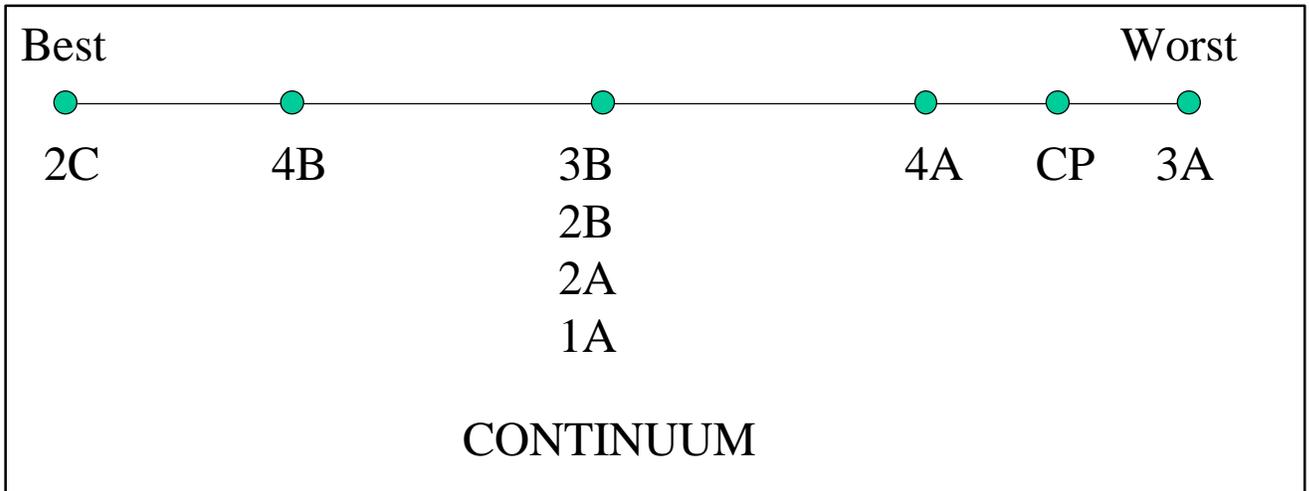
Note: Potential change to #3A depending on how CRPA criteria of "no wetland loss" is applied to areas zoned but currently in natural land cover.

AVOIDANCE OF WETLANDS IMPACTS (continued)

First Evaluation



Second Evaluation



MITIGATION

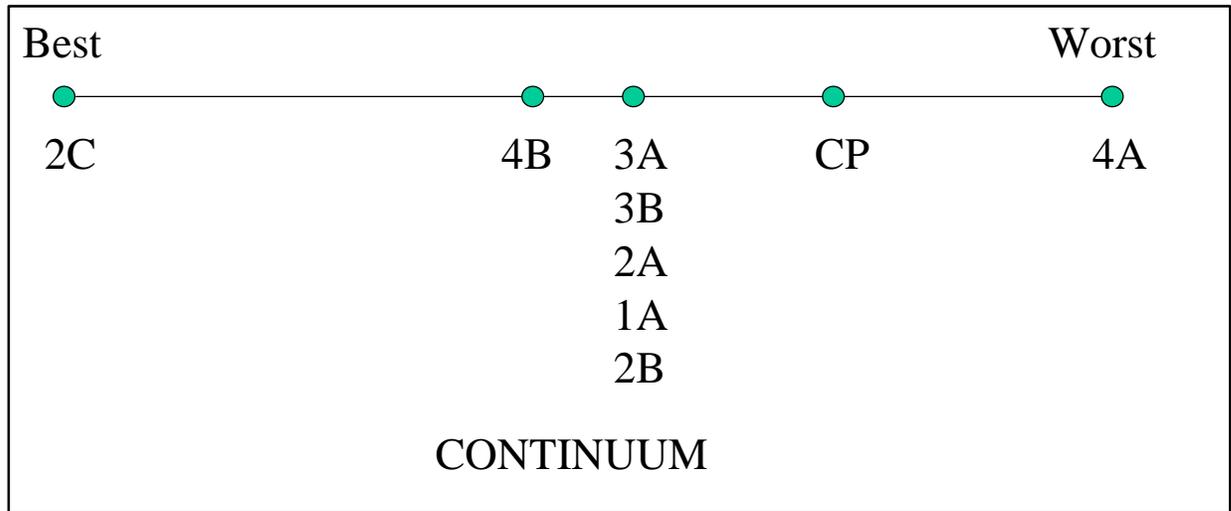
HUB ALTERNATIVE 3A

FACTOR	AT 0%	AT 5%	AT 10%
J1 AREA:	CRPA makes no change from alt #1 for proposed preserve		
	Acres of risk do change <u>16,000</u> = 7.6 2,100	<u>16,000</u> = 2.9 5,534	<u>16,000</u> = 11.8 8,967
J2-B FUNCTION IN NON-PUBLIC LAND			
	PROP: 16,000 X H X 76,000 X 100 = 21		
	21 / 0 / 0 = 21 units		
	FROM F2: 0/0/28 <u>x1</u> = 2.8 units	0 / 4.5 / 2.8 <u>x3</u> <u>x2</u> <u>x1</u> 0 + 9.0 + 2.8 = 11.8	0 / 9.0 / 2.8 <u>x3</u> <u>x2</u> <u>x1</u> 0 + 18.0 + 2.8 = 20.8
	2.8 <u>21</u> = 7.5	<u>21</u> = 1.8 11.8	<u>21</u> = 1.0 20.8

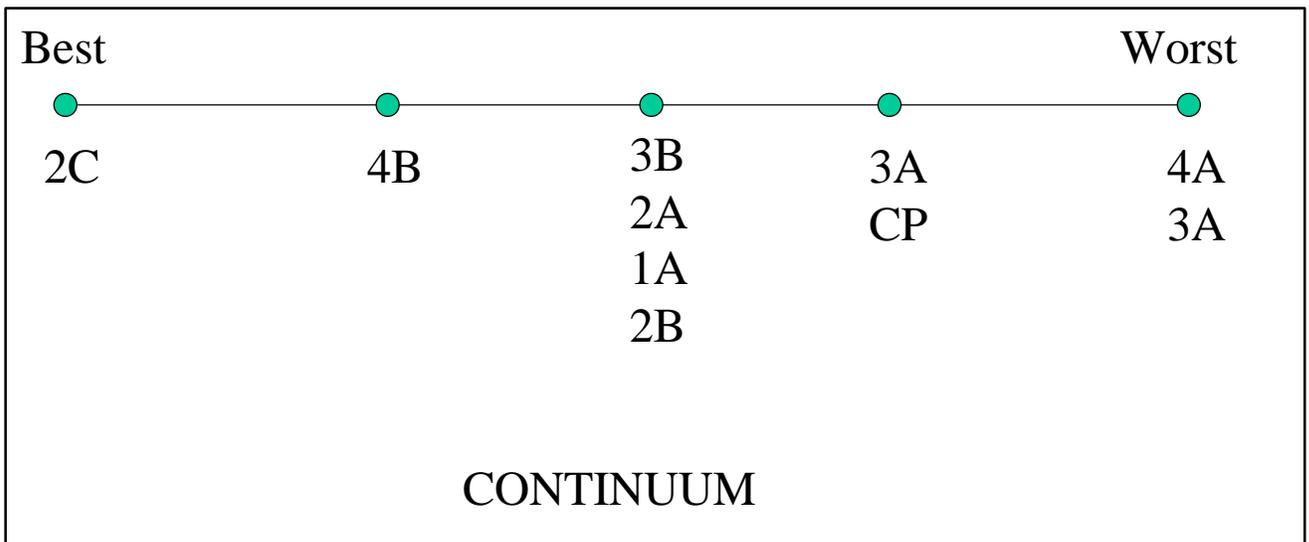
NOTE: Potential change to #3A depending on how CRPA Criteria of “no wetland loss” is applied to area zoned but currently in natural land cover.

MITIGATION (continued)

First Evaluation

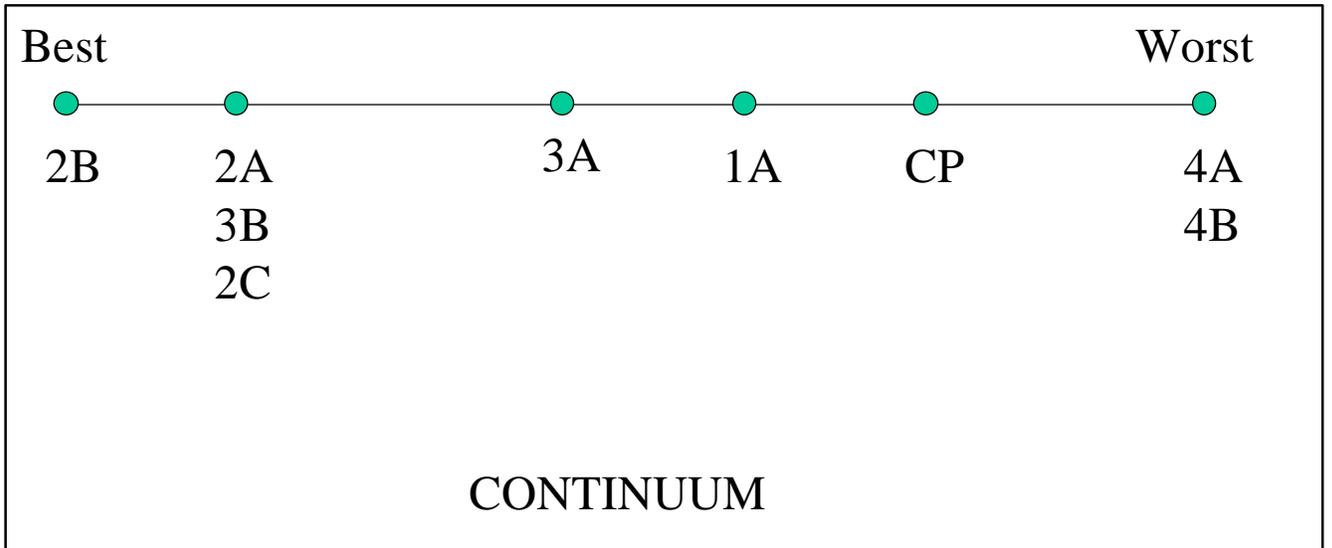


Second Evaluation

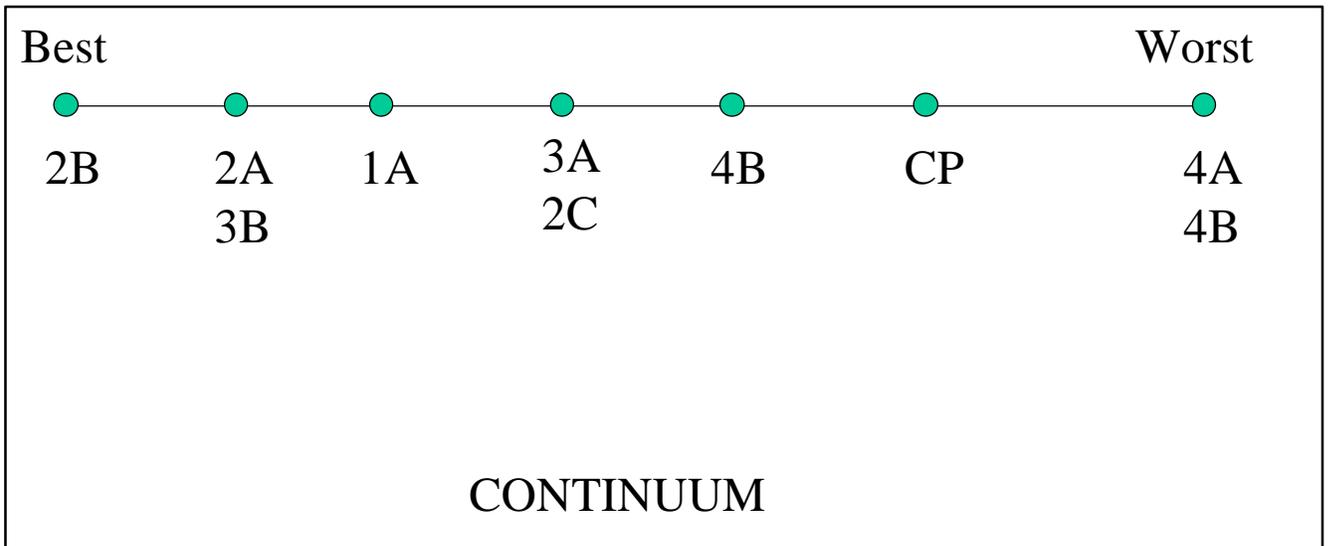


**ECOSYSTEM FUNCTION, WILDLIFE HABITAT,
AND LISTED SPECIES**

First Evaluation

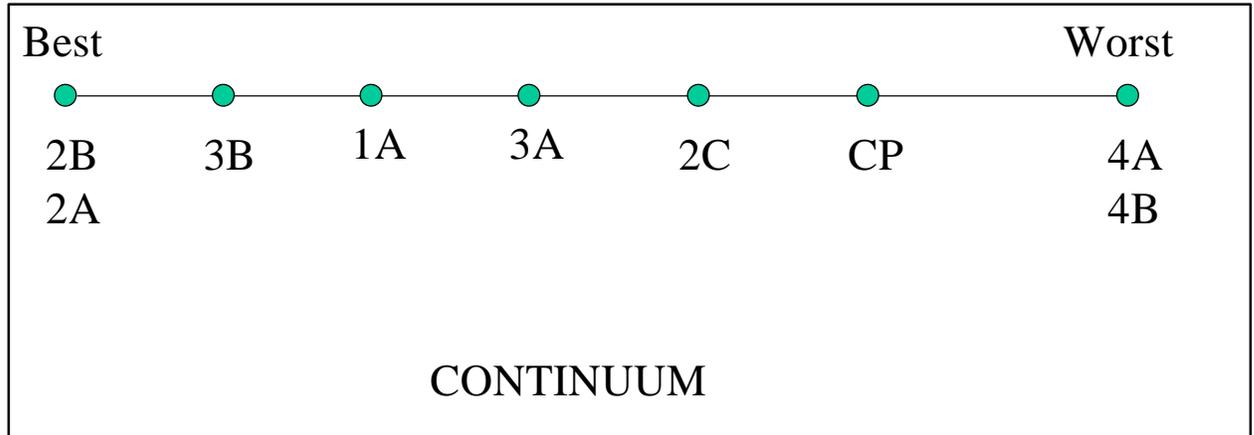


Second Evaluation

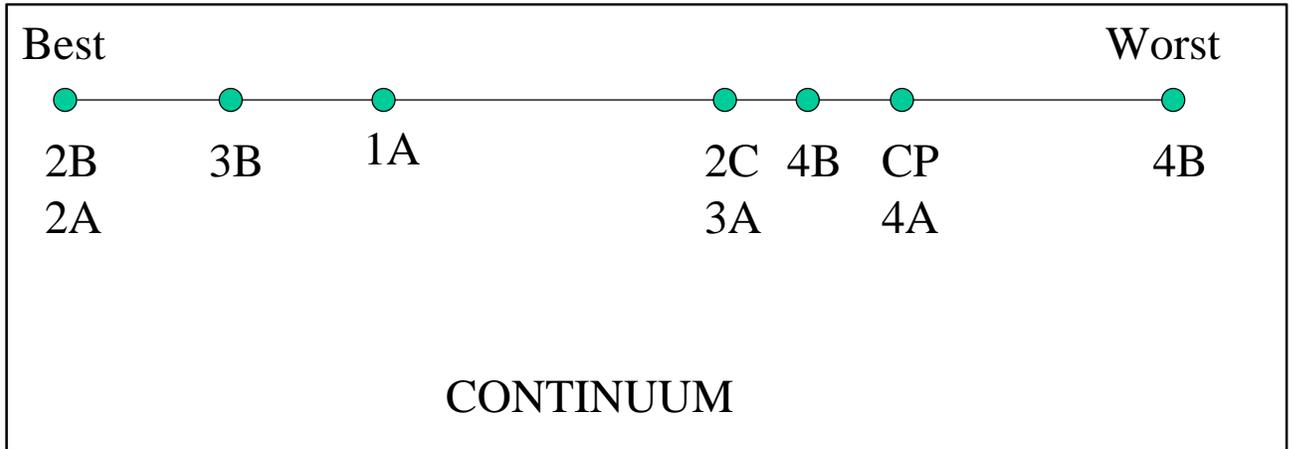


CUMULATIVE AND SECONDARY IMPACTS

First Evaluation

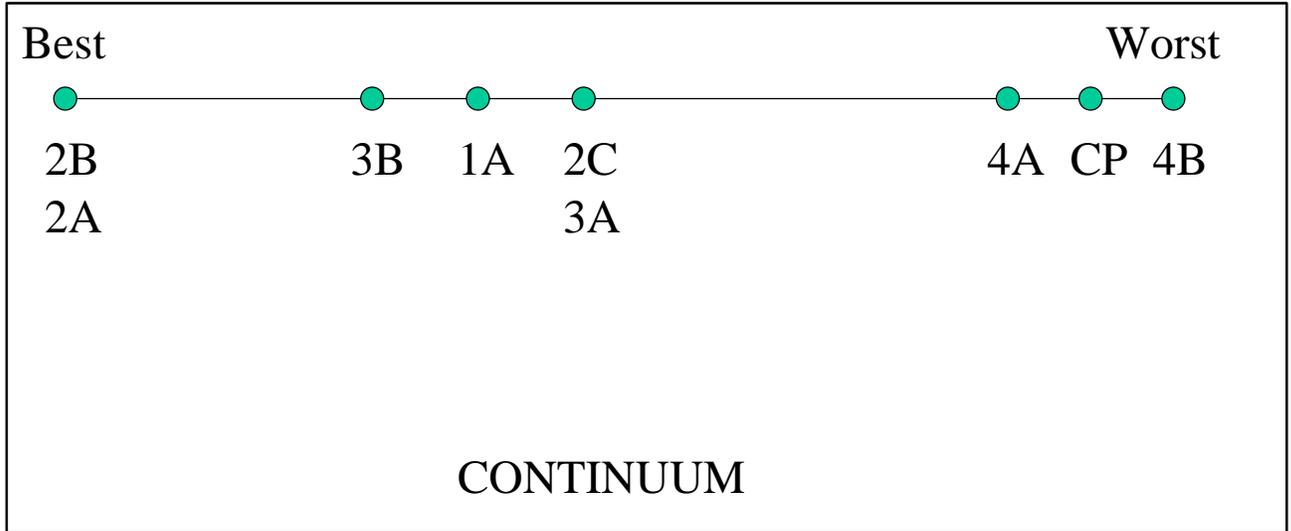


Second Evaluation

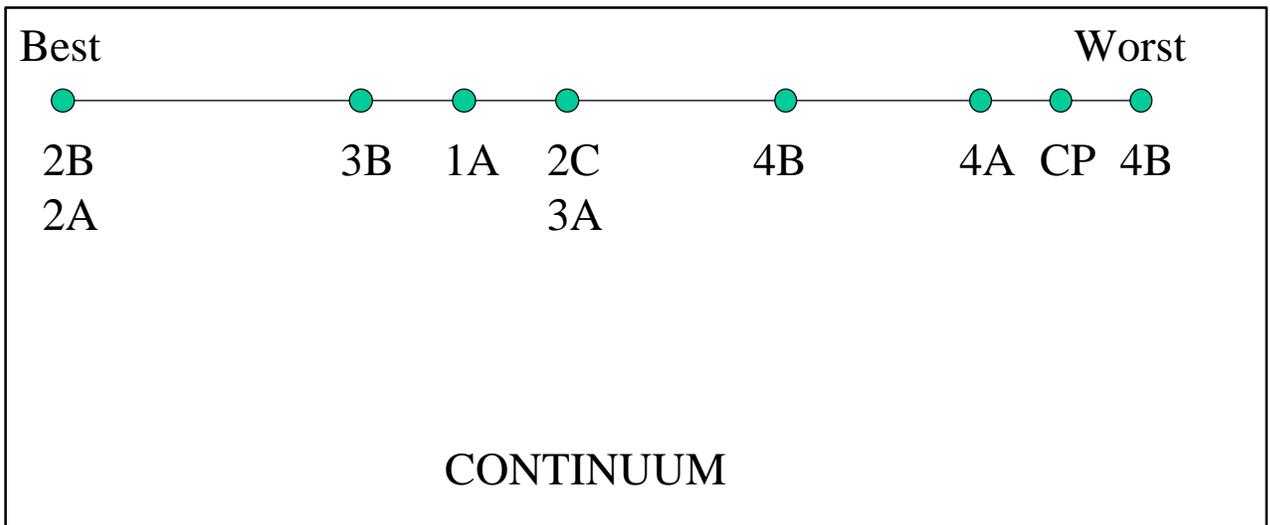


PUBLIC LANDS MANAGEMENT/USE

First Evaluation

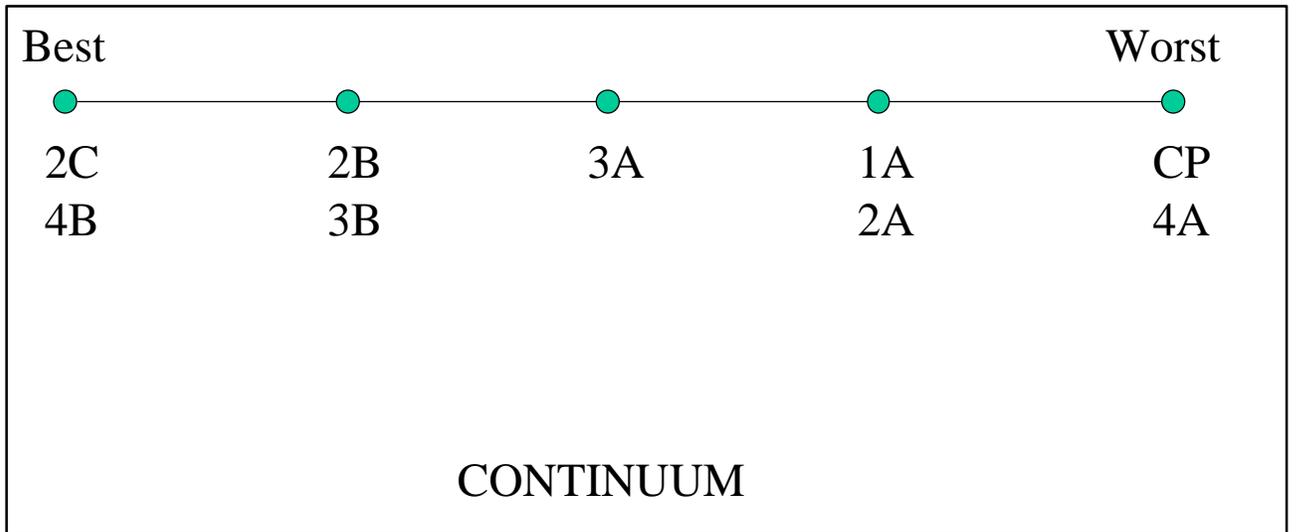


Second Evaluation

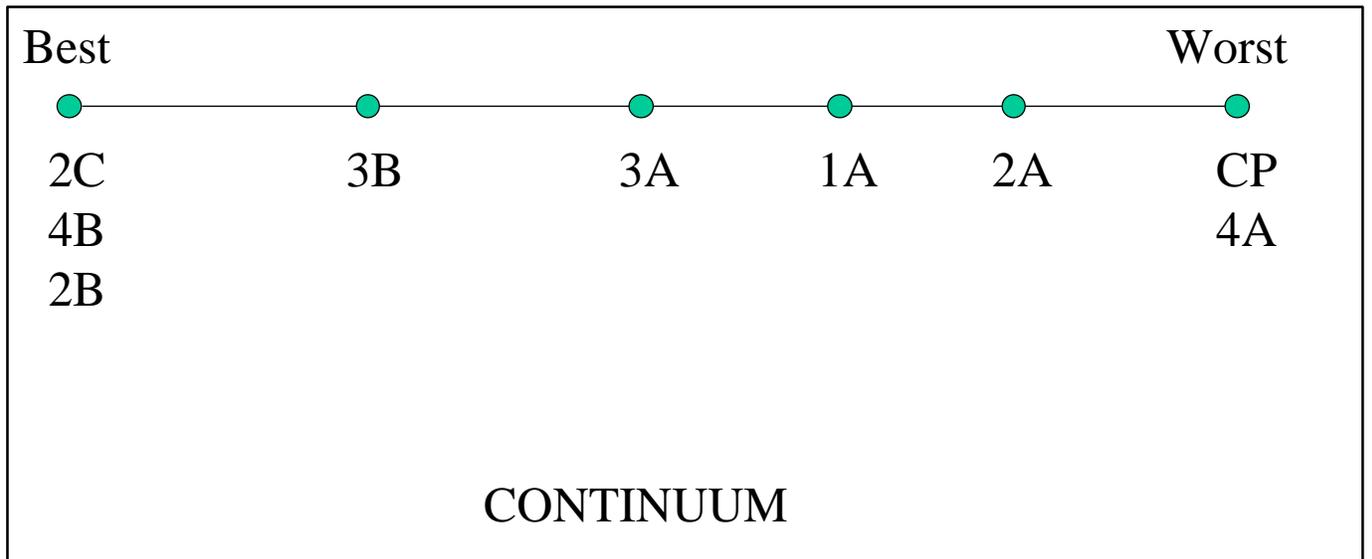


WATER QUALITY

First Evaluation

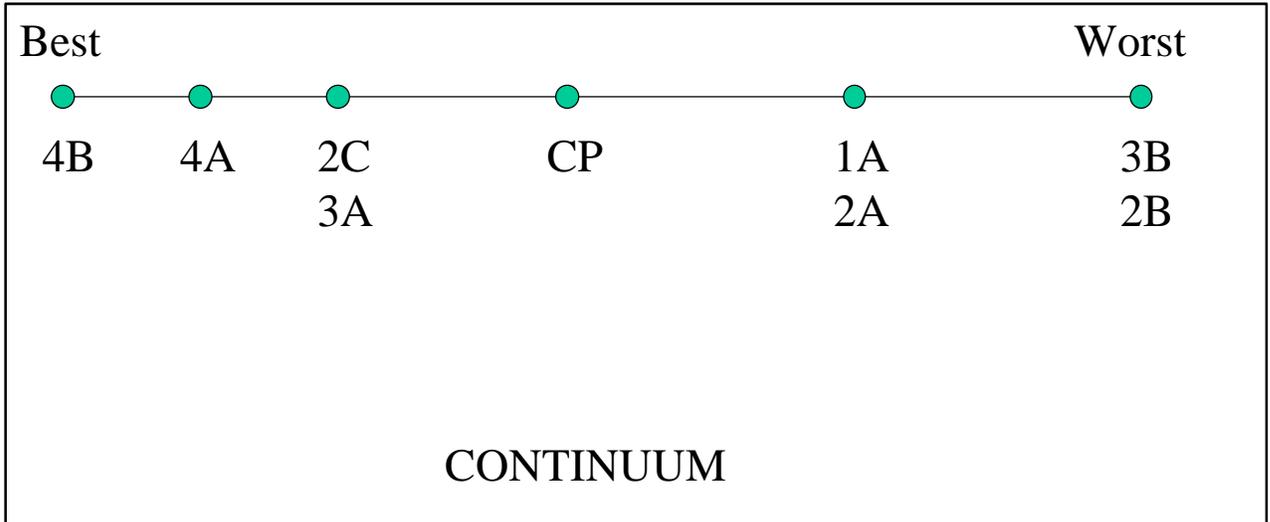


Second Evaluation

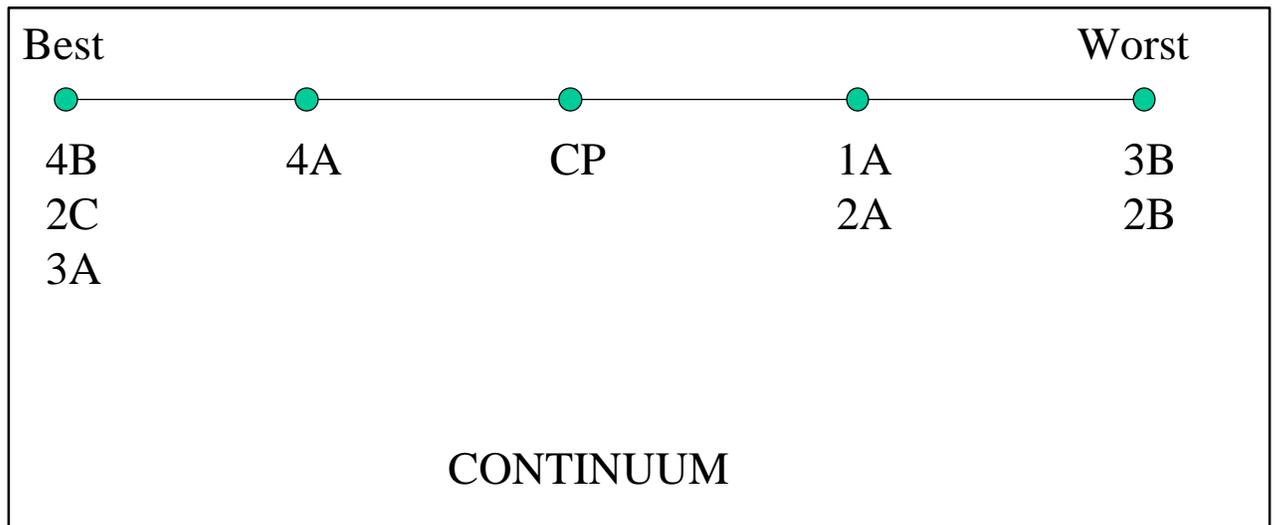


RESTORATION RETROFIT

First Evaluation

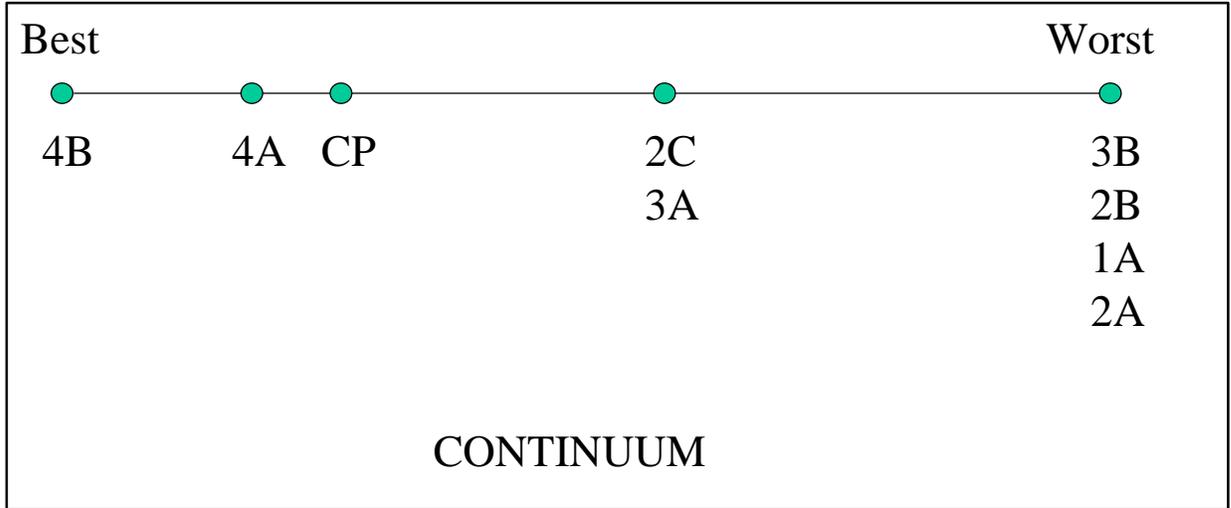


Second Evaluation

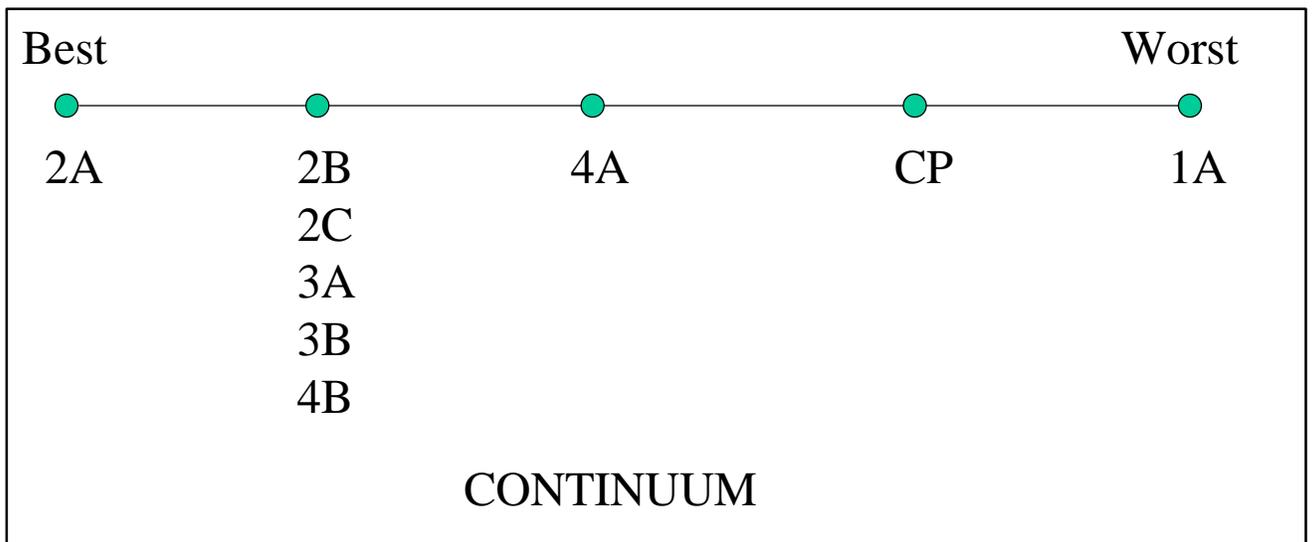


WATER MANAGEMENT

First Evaluation



Second Evaluation



ATTACHMENT AI

GIS OUTPUT: SECTION C COMPREHENSIVE PLAN

ATTACHMENT AJ

REPORT OUTLINE