

VII. INTERPRETATION OF RESULTS

The ADG was tasked with fully exploring and evaluating a series of alternatives for southwest Florida. The ADG was not directly tasked with identifying a consensus-based, preferred alternative. While the spirit of consensus and seeking agreement was certainly apparent at the ADG meetings, the time frame for this process did not allow for the delivery of one fully defined alternative that the Corps could use in the EIS. Some argued that coming to a single consensus alternative would nearly be impossible. Others within the ADG thought that it might be possible, suggesting that the twenty-eight alternatives could at least be reduced in number through compromise and negotiation.

Thus, the interpretation of analysis and results does not lead to a single alternative. However, as the alternatives are reviewed in aggregate, selected inferences can be made from the ADG's deliberations. This chapter provides selected observations that define overall trends in terms of specific alternatives. These observations are further processed to offer concluding remarks about how the ADG's results may be used to solidify permit improvements. **The analyses, methodology, and conclusions presented in this chapter are authored solely by the facilitation team and the Corps.** Based on the ADG's products, this chapter presents one interpretation of the synthesis of alternatives and analysis provided by the ADG.

EXAMINATION OF ALTERNATIVES: AREAS OF AGREEMENT

A significant amount of work went into the development of alternatives. The intent of the ADG was not to necessarily bring out "the best" alternative or identify a consensus alternative. However, as the alternatives were offered, it was very clear that the alternatives were in agreement for a majority of the study area. That is, all four subgroups designated that land for the same purposes/strategy to support their vision for southwest Florida. In total, approximately 67 percent of the study area analyzed by the ADG was characterized by full agreement at the general level of land use. However, there were many areas for which ADG members had varying ideas. The value of the work from the ADG is where there is disagreement; the Corps has a very good understanding of the nature of disagreement.

To get to these general statements of inference, a fair amount of analysis of the alternatives was required. The following sections describe this analysis leading to a graphical portrayal of the areas of agreement and disagreement. A synopsis of each alternative is presented in Appendix C.

Description of Alternative Families and Subfamilies

The ADG prepared twenty-eight alternatives. A list of all the legends finds a total of 137 names. This is too large a number to begin comparing and contrasting the alternatives. Further study shows 59 unique names. For example, one unique name is “Urban and Industrial” that was used by ten alternatives as-is without any additional remarks. However, two other alternatives used this designation but with the additional proposal for flowway improvements. So this would be a second unique name. On the other hand, the name “Rural Residential” in Zoom A in Lee County and “Rural Residential” applied to Golden Gate Estates in Collier County do not imply the same review and permitting standards.

The Corps developed two indices to cross-reference each of the legends to a uniform set of names. This retains the original legends as written by the members of the ADG and also provides for a systematic analysis. The first index is referred to as Families. Each of the 137 legends are cross-referenced to one of eight Families.

The second index is referred to as Subfamilies. Each of the 137 legend names are cross-referenced to one of thirty-eight Subfamilies. Although this is a large number of Subfamilies, in many cases there does not appear to be a major difference between Subfamilies within their parent Family. A complete list of Families, Subfamilies, and respective legends are provided in Appendix E.

Development (100)

Family 100 is called Development. Legend names that are cross-referenced to 100 are Development, Urban and Industrial, Urban, Airport, Urban Land Uses, Transition, Industrial, and Rural Residential (for Zoom A).

Within the Development (100) Family are six Subfamilies: 110 is indexed to those names that added no additional modifiers; 120 is indexed to legends that proposed flowway improvements; 130 indexed to the Zoom B (hub) Alternative 2A legend proposing off-site compensation for wide-ranging species; 140 to the proposal for regional/comprehensive stormwater management; 150 to the Zoom C Alternative 1B proposal to replumb Henderson Canal and for culverts under Tamiami Trail; 160 to the criteria found in Attachment S of meeting 8 for the urban area. Three of these directly speak to flowway improvements and could be combined.

Lehigh Acres (200)

Family 200 is called Lehigh Acres. Legend names that are cross-referenced to 200 are Urban Zone (Lehigh Acres); Restoration, Retrofit, Redevelopment; Acquire, Restore, Fix; Redevelopment; Lehigh Acres Zone; Lehigh Acres Greenway; and Water Storage. The 200

Family was created distinct from the 100 Family to highlight the level of discussion given this area by the ADG.

Within the Lehigh Acres (200) Family are seven Subfamilies: 210 is indexed to the “Urban (Lehigh Acres)” name that had no additional modifiers; 220 is unassigned; 230 through 270 are indexed to the various names by which several Zoom A alternatives proposed various ideas for redevelopment and restoration within Lehigh Acres.

Golden Gate (300)

Family 300 is called Golden Gate. Legend names that are cross-referenced to 300 are Golden Gate Estates, Golden Gate Estates Zone 1, Golden Gate Estates Zone 2, Estates (Rural Residential), and Rural Residential (from Zooms C and D). This Family was created to highlight the unique characteristics of this area. In Zoom C, Alternatives 1A, 1B, 2, 3A, and 3B used the various Golden Gate names for the same area named in Alternative 1 as “Rural Residential.” Alternative 1 used the name “Rural Residential” over a portion of this footprint and “Urban” over the rest. In Zoom D, Alternatives 2A and 2B used Golden Gate names for the same area named “Rural Residential” in Alternatives 1 and 4. Alternatives 1A and 3 used Golden Gate names over a portion of this footprint and “Preservation Lands” over the rest.

Within the Golden Gate (300) Family are five Subfamilies: 310 is indexed to the names that had no additional modifiers; 320 is unassigned; 330 through 360 are indexed to the various names by which several alternatives in Zooms C and D proposed various criteria to be applied to projects within Golden Gate Estates.

Agriculture (400)

Family 400 is called Agriculture. Legend names that are cross-referenced to 400 are Agriculture, Agricultural Preserve, Agriculture (Limited Intensification), Agriculture - Maintain Intensity; Agriculture - go to preserve, Agriculture (BCACSC), Mining, and Mining Lands. Only three alternatives actually designated mining. Some of the other alternatives indicated in their remarks that mining was an authorized land use within their agricultural designation.

Within the Agricultural (400) Family are Seven Subfamilies: 410 is indexed to the names that had no additional modifiers; 420 is indexed to names designating areas for mining; 430 is indexed to the names proposing nonintensification of agriculture, while 440 is indexed to those names proposing limited intensification; 450 is indexed to the Zoom D Alternative 2B proposal to remove the exemption from the Big Cypress Area of Critical State Concern; 460 is indexed to the proposal that if agricultural activity ends, the land reverts to preservation; 470 is indexed to the criteria found in Attachment S of meeting 8 for agriculture. Three of these directly speak to degrees of intensification and could be combined.

Rural (500)

Family 500 is called Rural. Legend names that are cross-referenced to 500 are Rural, Rural Development, and Rural Cluster (Agriculture). These legends could almost be placed in the Agriculture (500) Family. In Zoom B (hub), Alternative 2A assigns two names, “Rural” and “Agriculture,” to approximately the same lands assigned a single “Agricultural” name in Alternatives 1, 1A, 3B, and 4A. Note the use of the word “approximately” as these alternatives include subareas designated with various mining and urban names. In Zoom C, Alternatives 1A, 1B, and 2 assign “Rural” and “Agricultural” names to approximately the same area as the single “Agriculture” in Alternative 1. Alternative 3B names “Rural Cluster” and does not have a separate agriculture name. Alternative 3A does not use the term rural. Alternatives 1 and 4 apply “Rural Residential” to the Golden Gate Estates proper. In Zoom D, Alternatives 2A and 2B assign “Rural” and “Agricultural” names to approximately the same area as the single “Agriculture” of Alternative 1. Alternatives 1A and 3 do not use the term “Rural.” Alternatives 1 and 4 apply “Rural Residential” to the Golden Gate Estates proper. However, in Zoom A, all the alternatives clearly name approximately similar areas using various “Rural” names. The impression is that most of the rural names reflect a view of a mixture of existing ranchette, nursery, and similar uses in a fabric of natural vegetative cover. Therefore, the Rural Family was created in the interest of capturing the alternatives in Zoom A but with the recognition of the overlap with the Agriculture (400) Family in the other zooms.

Within the Rural (500) Family are Seven Subfamilies: 510 is indexed to the “Rural Residential” or “Rural Development” names in Zoom A that had no additional modifiers; 520 through 560 are indexed to the various names by which several alternatives proposed various ideas for rural development criteria, including clustering and provision for maintenance of historic flowways. In addition, a detailed draft for clustering criteria was presented and found in Attachment E of meeting 9.

Preserve (600)

Family 600 is called Preserve. Legend names that are cross-referenced to 600 are Preservation Lands, Preserve (Existing and Proposed), Preservation/Conservation, Preservation, and Conservation Lands.

Within the Preserve (600) Family are five Subfamilies: 610 is indexed to those names that had no additional modifiers; 620 is indexed to those names that proposed improvement of flowways; 630 is indexed to the name “Preserve (Existing and Proposed)” of Alternatives 2A and 3B of Zoom B (hub) that noted their delineation was based on the Land Conservation/Preservation Strategy Map adopted July 13, 1998, by the Estero Bay Agency on Bay Management; 640 is indexed to the criteria found in Attachment S of meeting 8 for preserves.

Permit Standards (700)

Family 700 is called Permit Standards. Legend names that are cross-referenced to 700 are Critical Resource Protection Area, Preservation Zone, Buffer Transitional Zone, Agricultural Zone, and Urban Zone (two names, one in Zoom A and one in Zoom B (hub)). These are proposed criteria and standards to be used in permit review. In Alternative 4B of Zoom B (hub), these criteria were described as an overlay on the underlying designations: in other words, the “Agricultural” designation of Alternative 4A is used, but in addition the criteria for “Critical Resource Protection Area (CRPA)” would be applied. In Alternative 4B, CRPA overlaps areas designated as “Agricultural,” “Preservation Lands,” and a sprinkling of others. In Zoom A, Alternative 5 subdivides the criteria between agricultural and preservation and other uses, but there remains the fundamental premise that these criteria are focused on the permitting process. This separate Family has been created to capture the unique thoughts presented by these alternatives and how they were evaluated. However, note that Zoom C’s Alternative 2 and Zoom D’s Alternatives 1A, 2A, 2B and 3 included in their definition of “Golden Gate Estates Zone 2” the criteria for the Buffer Transition Zone. These were cross-referenced to the Golden Gate (300) Family, since these were mixed with other criteria clearly identified with Golden Gate.

Within the Permit Standards (700) Family are six Subfamilies: 710 is unassigned; 720, 730, and 740 are assigned to the criteria proposed by Alternatives 2C, 3A, and 4B in Zoom B (hub) and are found in Attachment E of meeting 7; 750, 760, and 770 are assigned to various criteria proposed by Alternative 5 in Zoom A and are found in Attachment W of meeting 9.

Nonagreement (800)

Family 800 is called nonagreement. Legend names that are cross-referenced to 800 are Pending Review and Berm. Alternative 4A of Zoom B (hub) and 3A of Zoom C both identified areas where the groups preparing the alternatives could not agree whether to designate the location as development or preservation. Alternative 4B of Zoom B (hub) identified a Berm that the group could not agree to add to Alternative 4A. This Family was to capture these three circumstances that did not fall cleanly into any of the other alternatives.

Within the Non Agreement (800) Family are two Subfamilies: 810 is unassigned; 820 is indexed to the Berm proposed by Alternative 4B of Zoom B (hub); 830 is indexed to the name “Pending Review” where the group developing the alternative could not agree.

Agreement Map Structure

These Family and Subfamily indices were then added to the geographic information system (GIS) maps of the alternatives. The alternatives were then stacked on top of each other using the GIS software.

The steps of the GIS process were (1) dividing each alternative's map into a grid of squares measuring approximately 90 feet wide; (2) transferring the index value from the map into the grid cell; (3) comparing the Family and Subfamily indices found in the grid cells at the same geographic location for each of the alternatives; (4) creating two maps showing the number of different Family and Subfamily, respectfully, index values at a grid cell location; (5) checking the "slivers" of cell locations where the mapping of alternatives did not exactly line up and adjusting the maps accordingly; and (6) producing a final map.

The resulting map, "Overlay of Alternatives," shows for a large portion of the study area that the alternatives assigned the same Families. The various crosshatching shows the Family designation in those areas where the alternatives assigned the same Family. This overlay did not include the Permit Standards (700) nor the Non Agreement (800) Families.

The solid gray shows areas where there were two different Families assigned by the alternatives. For example, if four alternatives assigned Preserve (600) Family and the fifth assigned Agriculture (400), then there were two different Families and the area would be shaded gray. Typically, the two Families within the gray area can be determined by looking at the Families indexed adjacent to the gray. For example, a gray area found sandwiched between an area designated as "Preserve" and another as "Agricultural" is typically reflecting that some alternatives assigned the Preserve Family and the others the Agriculture Family.

The white areas, unshaded and not crosshatched, are those with more than two families. These areas of disagreement are a very small proportion of the total area.

The number of Subfamilies is strongly correlated to the zoom. For example, whenever all of the alternatives indexed the Development (100) Family within Zooms C and D they also agreed on the Subfamily. In Zoom B (hub), there were two Subfamilies, and in Zoom C, three Subfamilies. There are six Subfamilies in the Development (100) Subfamily. The number of Subfamilies is probably a combination of the (1) characteristics of each zoom and (2) the creativity of the group when the alternatives were developed.

IMPLICATIONS FOR PERMIT STRATEGIES

The agreement map shown in Figure VII-1 provides a basis for subsequent analysis and application to the permit program. The following are some examples picked out from the large mass of information represented by this map.

Within Zoom D, there was agreement to designate the center of Camp Keais Strand as "Preserve." However, there was a difference in how wide the Preserve should be. One alternative delineated as Preserve only those areas that are covered with natural vegetation. The adjoining farmlands were designated "Agriculture." Other alternatives included in their delineation of Preserve some of these adjoining farm fields. The farm fields that are delineated as Preserve in one alternative and Agricultural in the others are colored gray on the map. The next

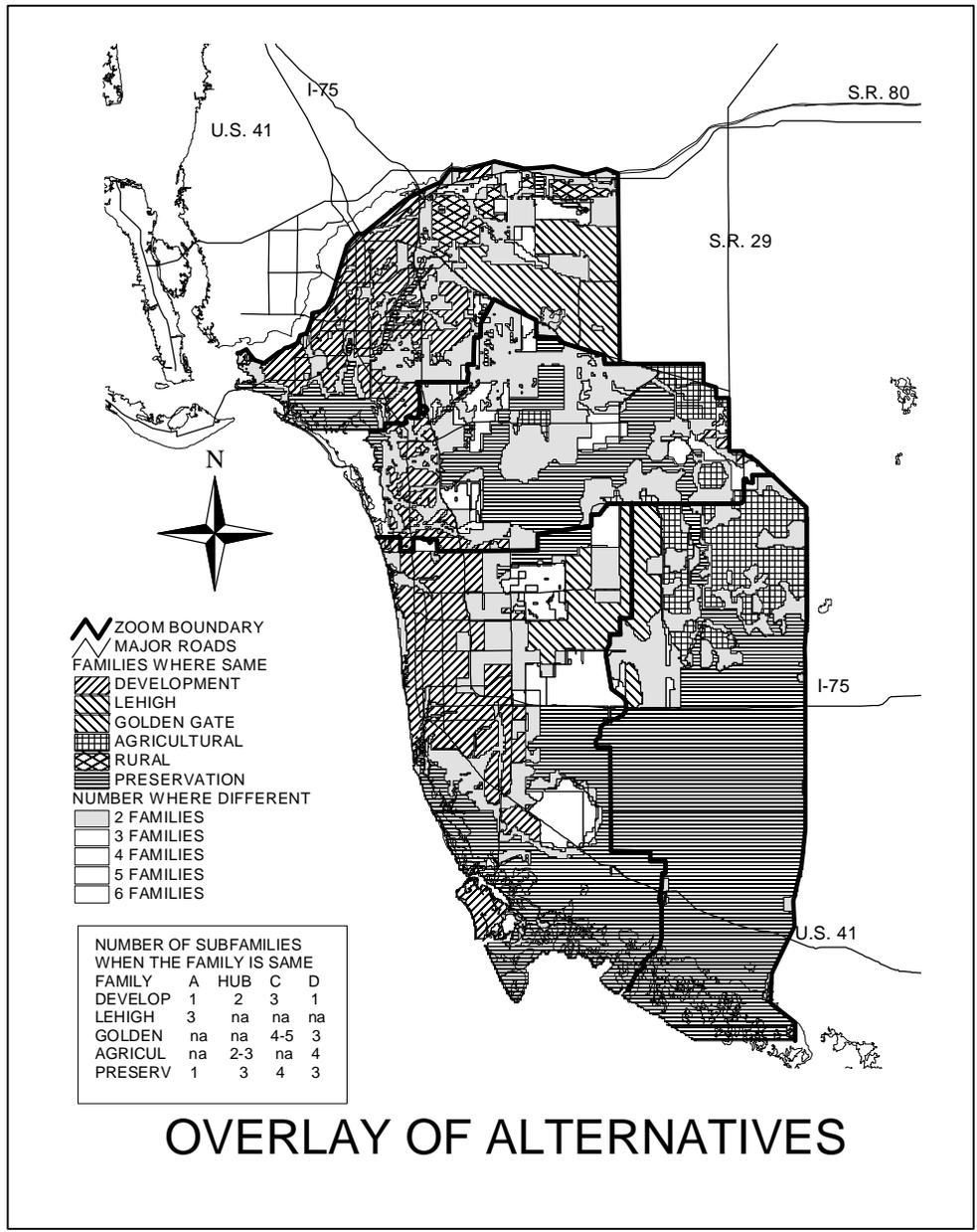


FIGURE VII-1

task would be to study the evaluations of the one alternative and compare it with the evaluations of the other alternatives to understand the ramifications of choosing one width over the other.

Potential Permit Implications: Zoom D

Within Zoom D, all of the alternatives delineated Southern Golden Gate Estates as Preserve. For Northern Golden Gate Estates, the alternatives did not agree for the portion of the Estates adjacent to I-75. Two alternatives delineated that portion as Preserve to show the historic assemblage and interconnection of the wetlands. The other three alternatives delineated

continued residential development. This area is shown in gray. However, one of the three alternatives included criteria to preserve these wetlands but did not explicitly map them. For the remainder of Northern Golden Gate Estates, all the alternatives agreed to residential development.

The area of agreement is crosshatched on the map as Golden Gate. Three of these alternatives proposed additional criteria for project review. The next task would be to compare the evaluations of those alternatives proposing preservation with the evaluations of the other alternatives to understand the benefits and impacts of adopting one or a combination of the preservation proposals.

Potential Permit Implications: Zoom C

Three patches of white are mapped within Zoom C. These are areas where the alternatives did not agree. One location of disagreement is on Immokalee Road; one is in Belle Meade; and the third is off of I-75. All three areas are just outside (east of) the urban boundary. Within all three areas, alternatives delineated a wide variety of project types. For example, in the Immokalee area: one alternative delineated part of the area as Agriculture and part as Urban; three alternatives delineated part Rural with varying amounts of Preserve and Urban; one alternative delineated a part of the area as Transition and the rest either Urban or Mining; and the group that prepared one alternative could not agree whether to delineate it as Development or Preserve. All three of these white areas are expected to be the locations of future development, yet there is no agreement that development is appropriate. One can anticipate contentious permit reviews in these areas.

Within Zoom C, an area along Tamiami Trail south of Naples is shaded gray. South of the gray area (along the coast), all of the alternatives agreed on Preservation. North of the gray area all of the alternatives agreed on Development. The alternatives delineated various proportions of the gray area as Preserve and Development. This indicates the appropriate boundary between the Preserve and Development is unclear. A study of the evaluations may provide insight into the ramifications of the different boundaries.

Potential Permit Implications: Zoom B (Hub)

Within Zoom B (hub), the majority of the area west of I-75 is delineated Development. The streaks of gray through the Development crosshatching follow existing waterways. Two alternatives delineated these areas simply as Development. Four alternatives proposed various widths and extents of flowways through developed areas and delineated them as Preserves. Three other alternatives proposed permitting criteria that would require these flowways with development. None of the groups attempted to draw exact boundaries between the flowways and development. A comparison of the evaluations between the Alternatives may validate the concept with the details to be addressed during individual project review.

Within Zoom B (hub), all of the alternatives agreed on delineating an area centered on the Corkscrew Swamp as Preserve. However, the lands surrounding that Preserve are shaded gray. One alternative delineates this gray area as Agriculture. One delineates a portion as Agricultural and the rest as mining. Two alternatives delineate a part as Agriculture and the rest as Preserve or Mining. Two delineate part as Preserve and the rest as Rural or Agriculture with a limitation on the intensification of current activity. Three alternatives overlay permit criteria that preclude expansion into existing natural areas. Essentially, each Alternative selects one of three approaches: current Agricultural and other uses; explicitly map an expansion of the Corkscrew Preserve; or impose constraints on project activity to maintain the existing natural areas.

Potential Permit Implications: Zoom A

Within Zoom A, all of the alternatives gave special attention to Lehigh Acres. All but one of the alternatives described a variety of ideas for redevelopment. This presents an opportunity to discuss these ideas now before their implementation is precluded as houses are built.

Within Zoom A, several gray areas are shown around the perimeter of Lehigh Acres. In each gray area, the alternatives delineated two types of projects. The combination of which two varied: for two patches the difference is between Development and Preservation and in the others between Development and Rural. The Development includes not only the “Urban” legend but also the various ideas for redevelopment. The differences reflect three broad categories of ideas for the fringe around Lehigh Acres: establish Preserves surrounding the remaining natural areas at the headwaters of various waterways; limit to Rural; or develop as Urban.

Permit Generalizations

In conclusion, three generalizations can be made.

Within the crosshatched areas, there is fundamental agreement on the appropriate type of future projects but variations in the criteria to be applied to their review. The next step should be to review what the evaluations reported for the range of criteria. This will improve the understanding of which criterion or combination of criteria could be incorporated into review processes to increase permitting efficiency.

Within the shaded areas, there is disagreement on the appropriate type of future projects, but generally the disagreement is where to locate the geographic boundary between the two types. The next step should be to review the evaluations that bracket the range of disagreement. This will improve the understanding of which issues are most affected by permitting decisions that cumulatively will establish this boundary.

Within the white areas, the disagreement indicates that any individual project review will be very challenging. These evaluations would provide a starting point if an opportunity arises to open discussions prior to formal project review.