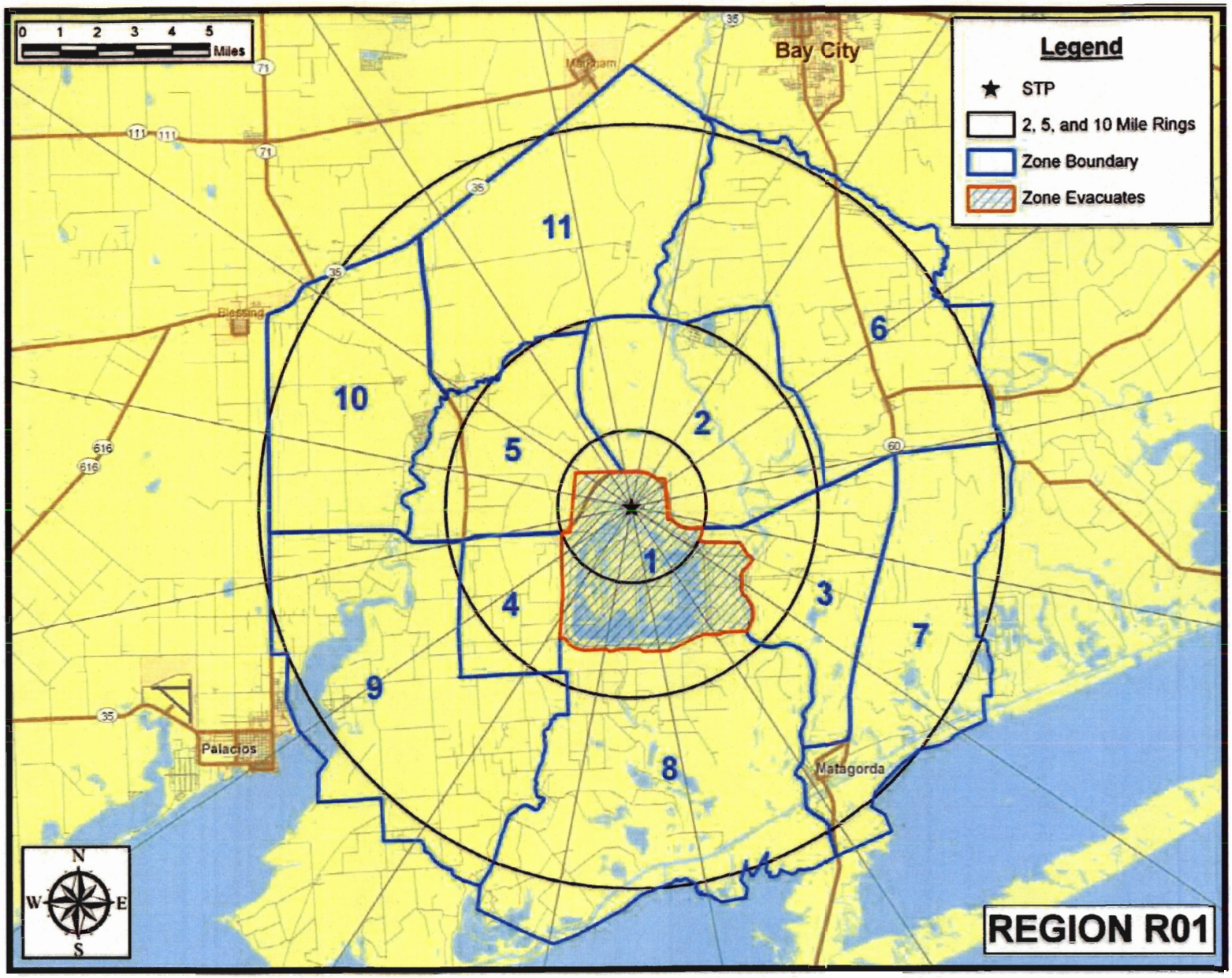
APPENDIX H

Evacuation Region Maps

APPENDIX H: EVACUATION REGION MAPS

This appendix presents maps of all Evacuation Regions.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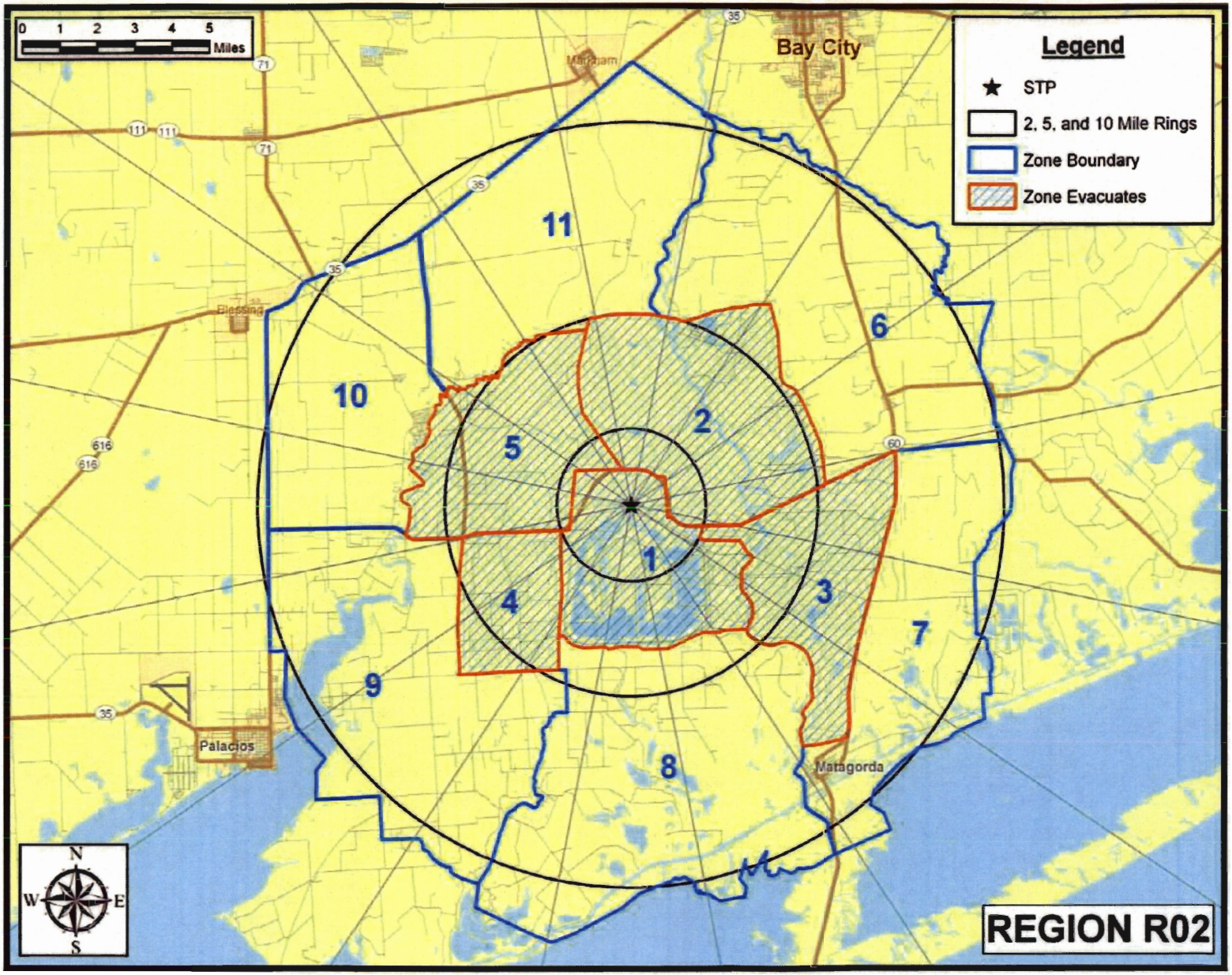
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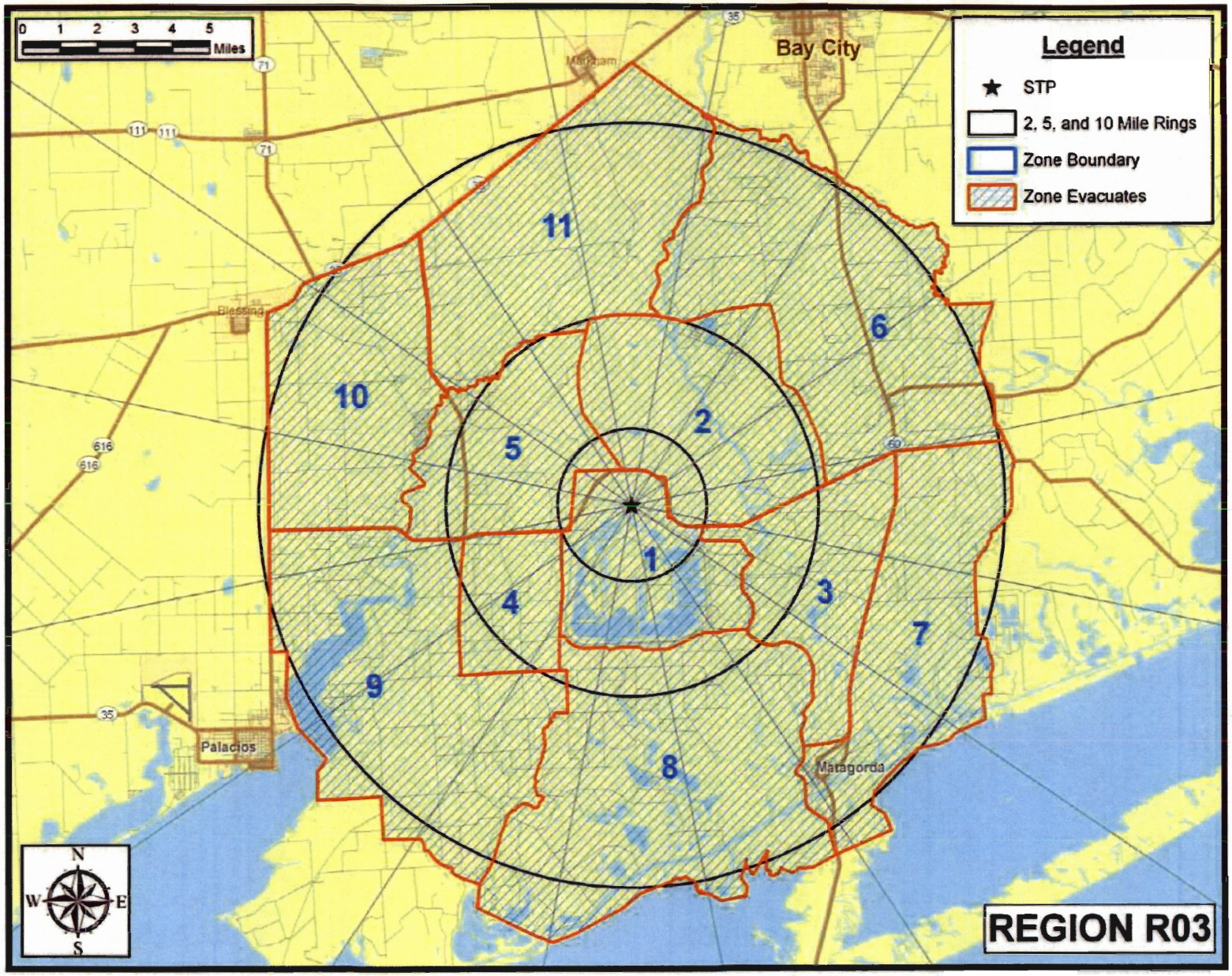
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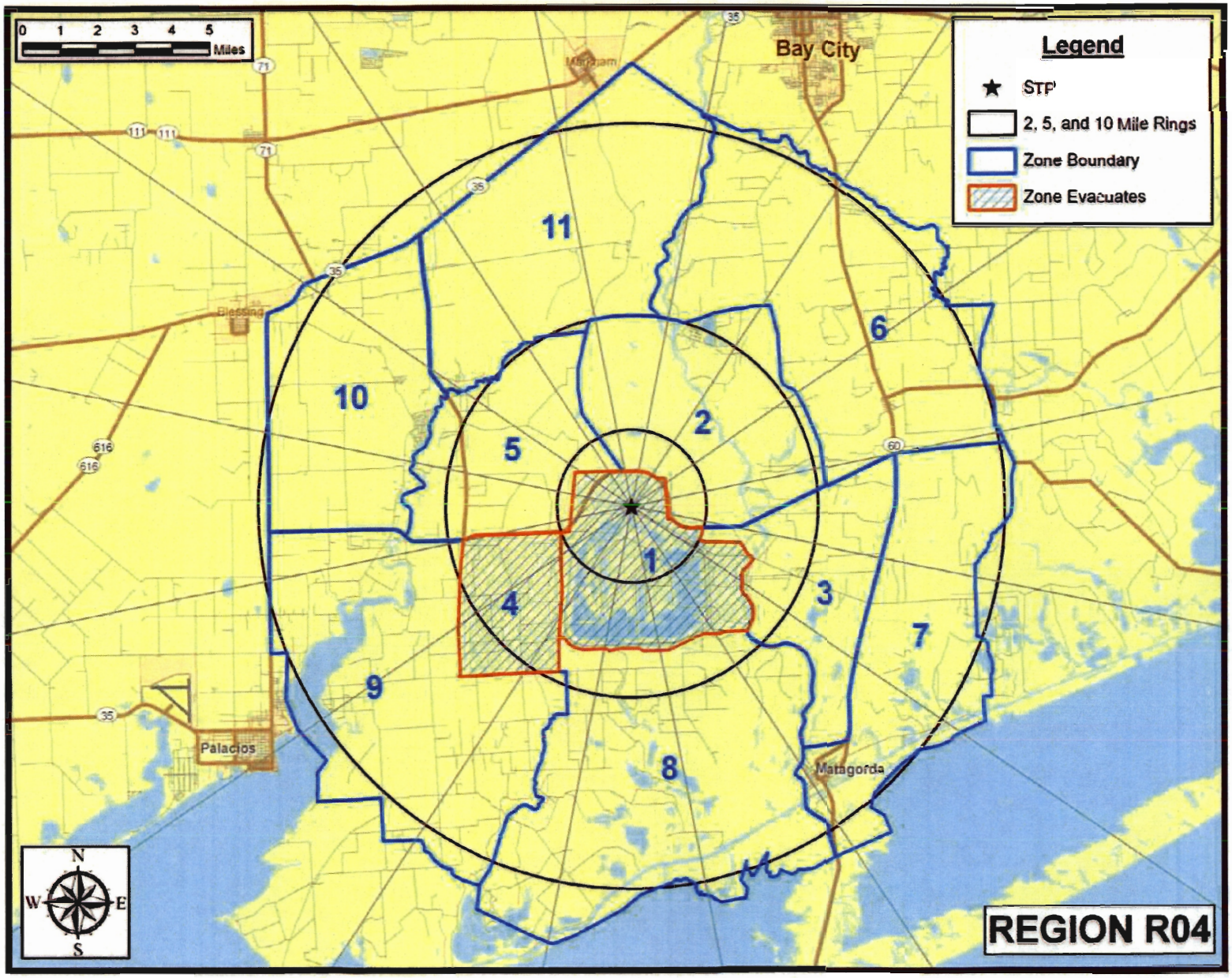
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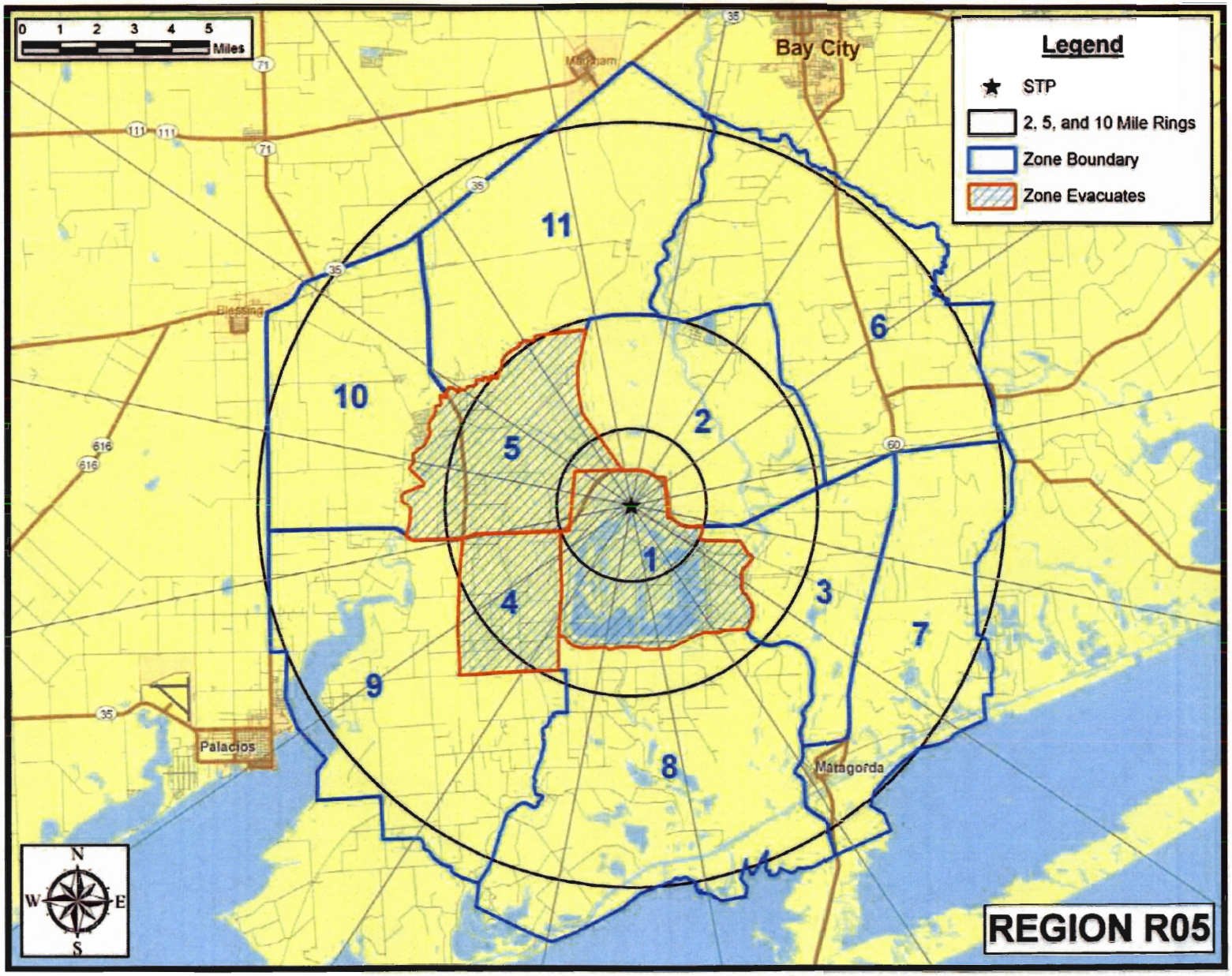
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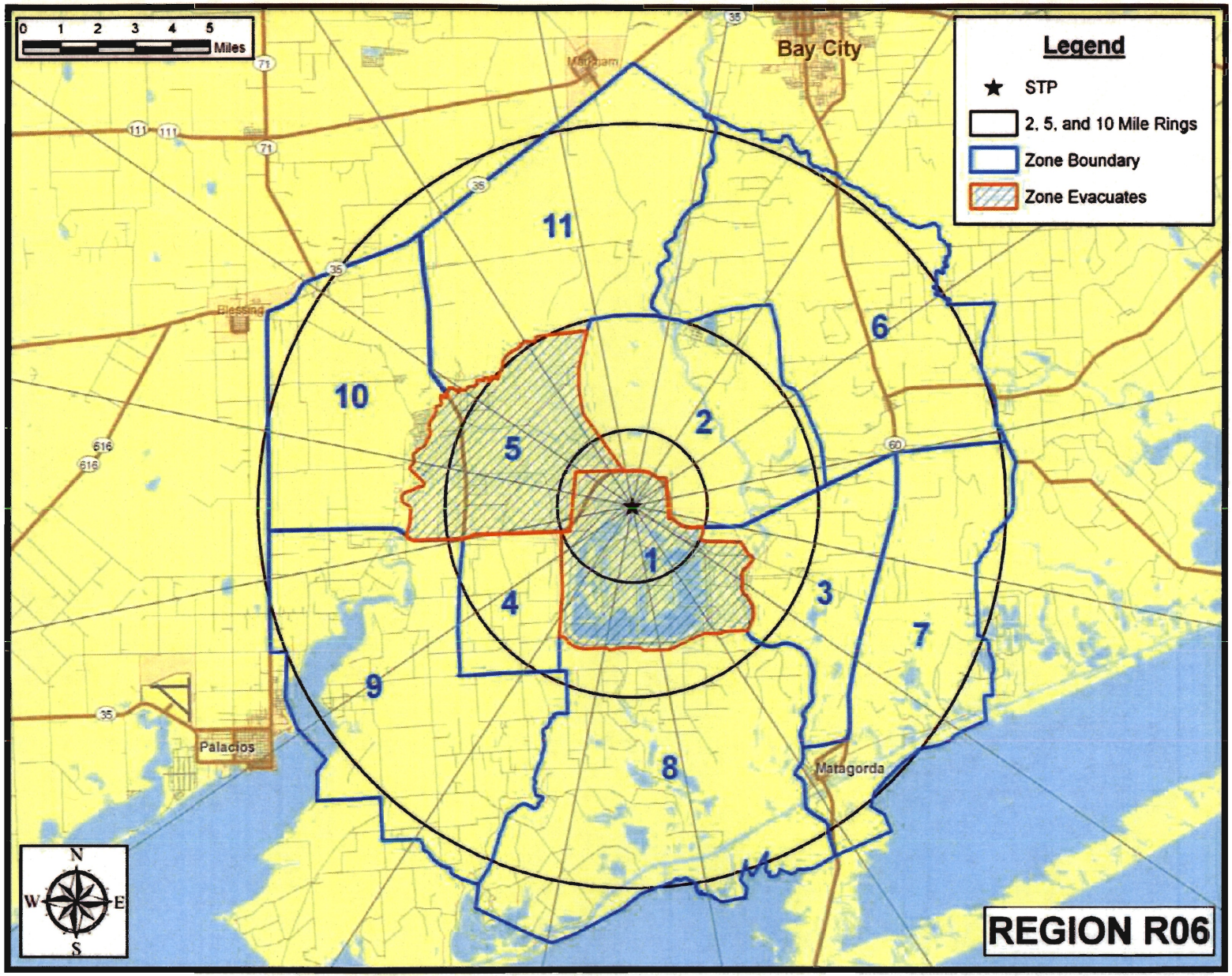
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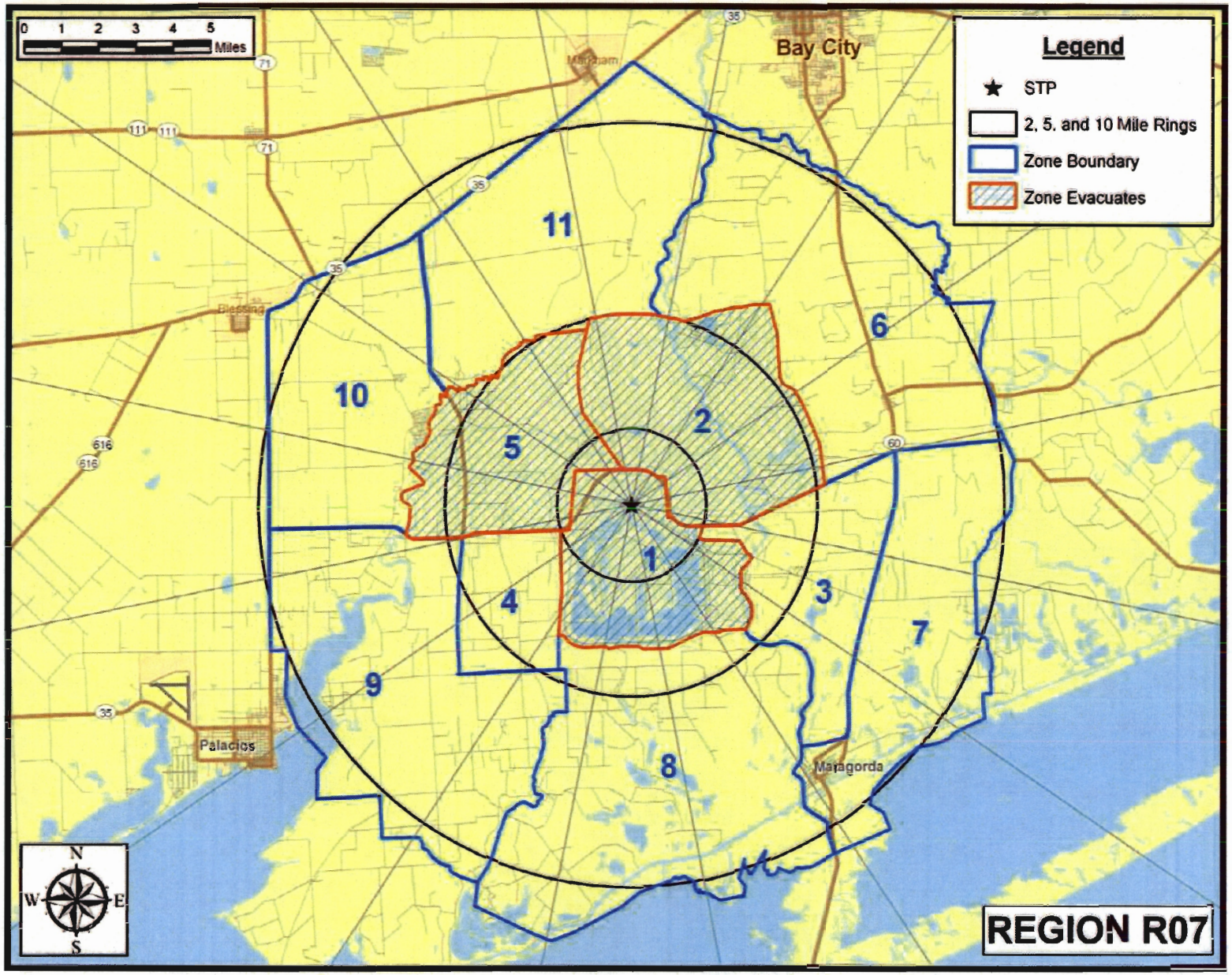
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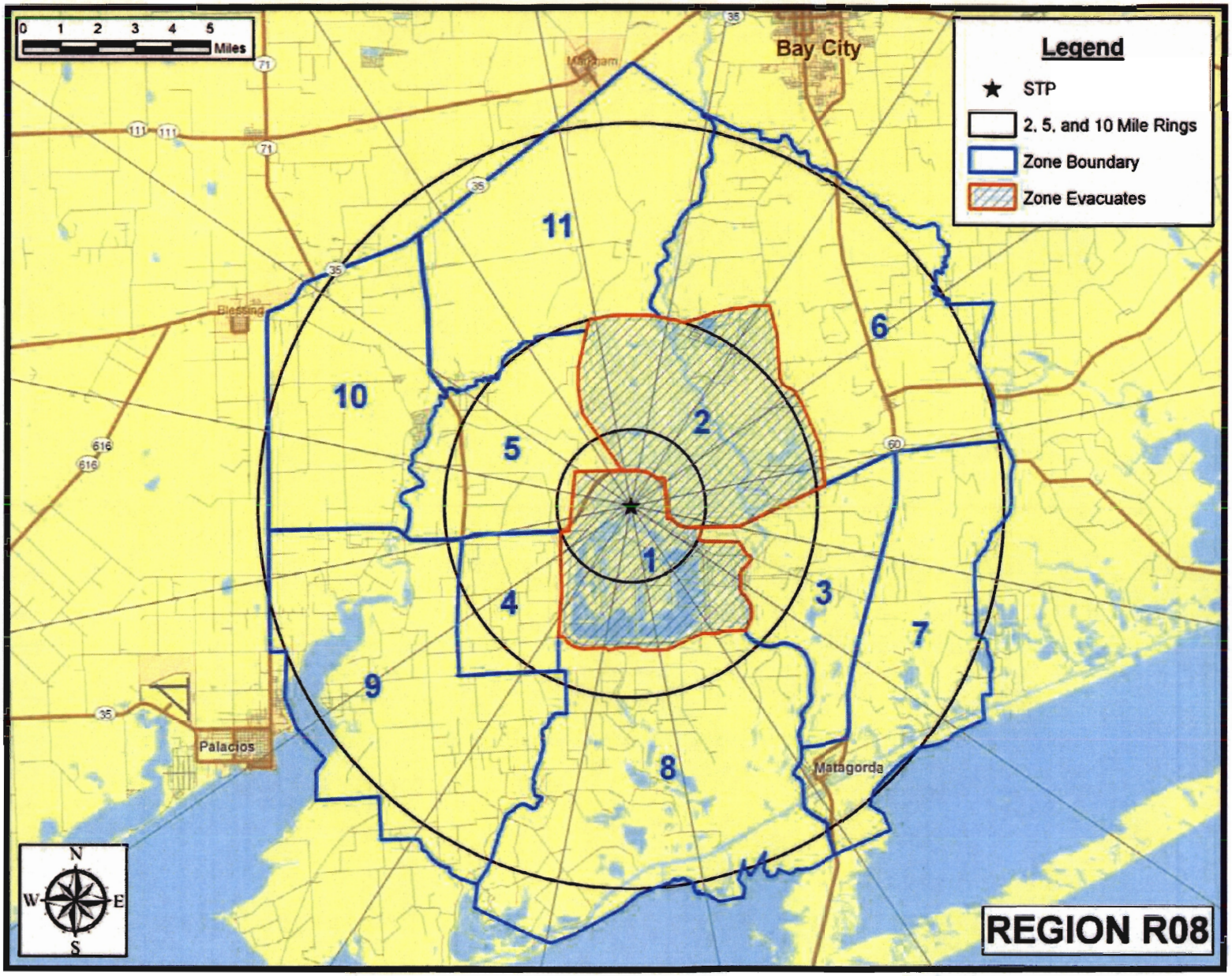
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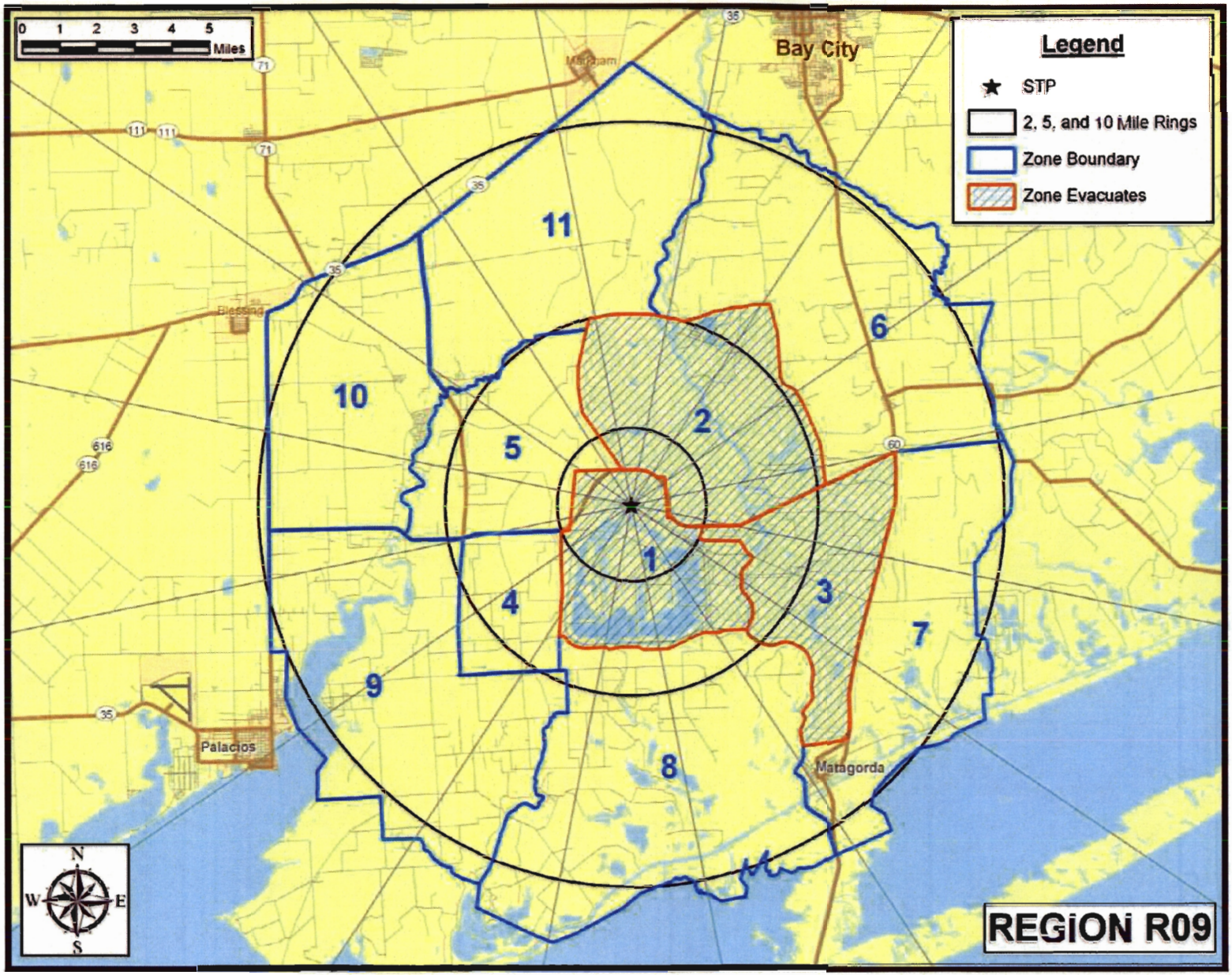
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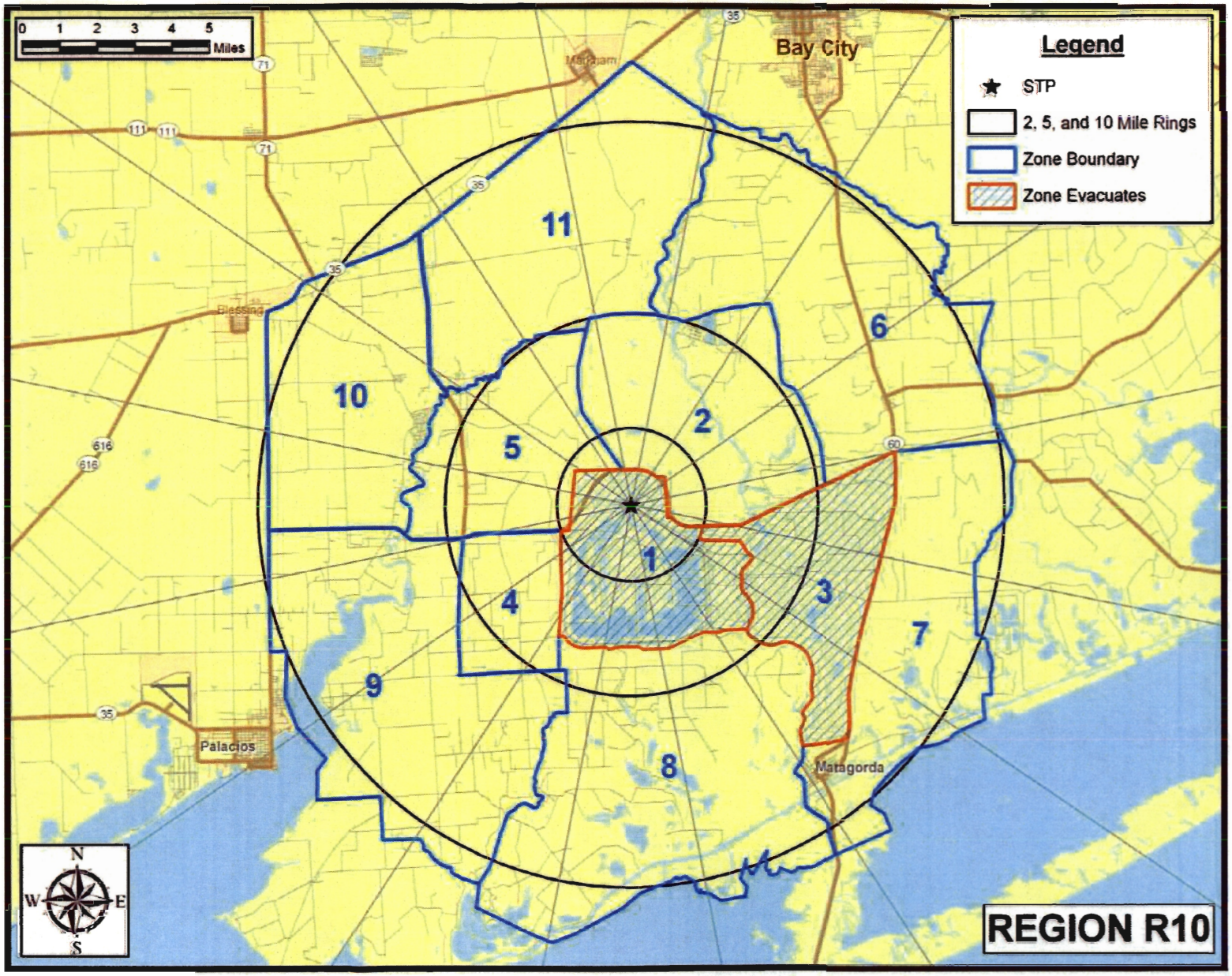
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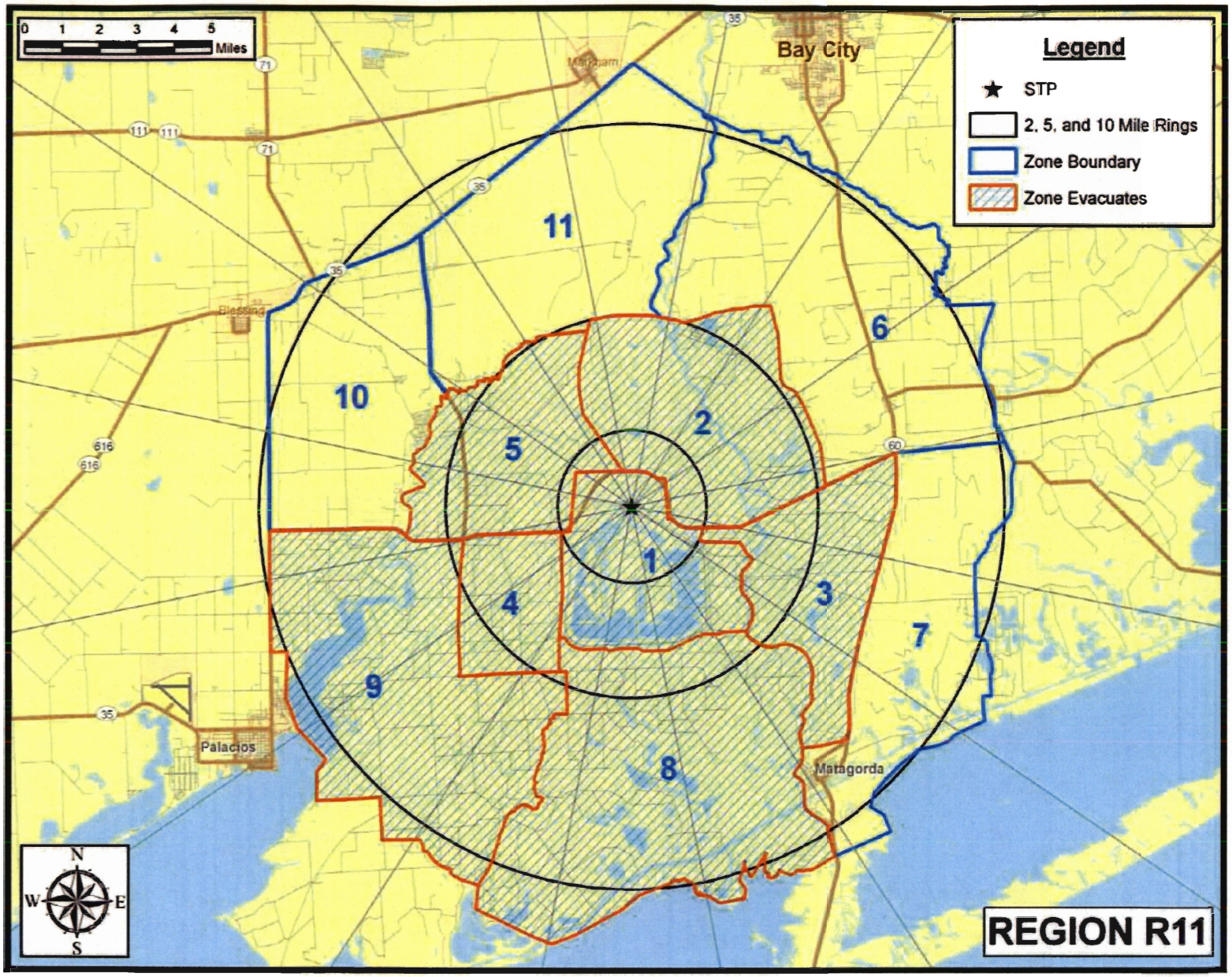
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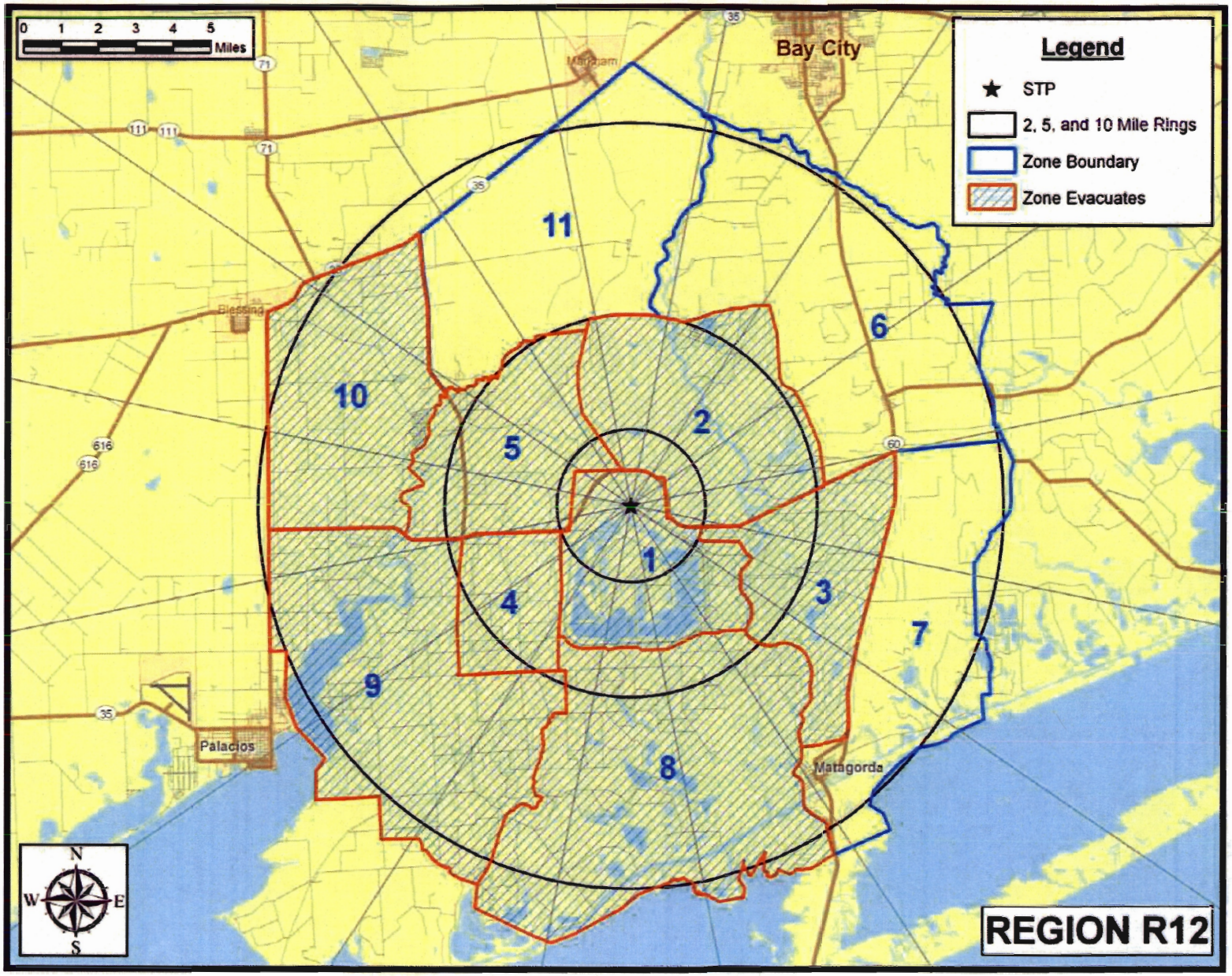
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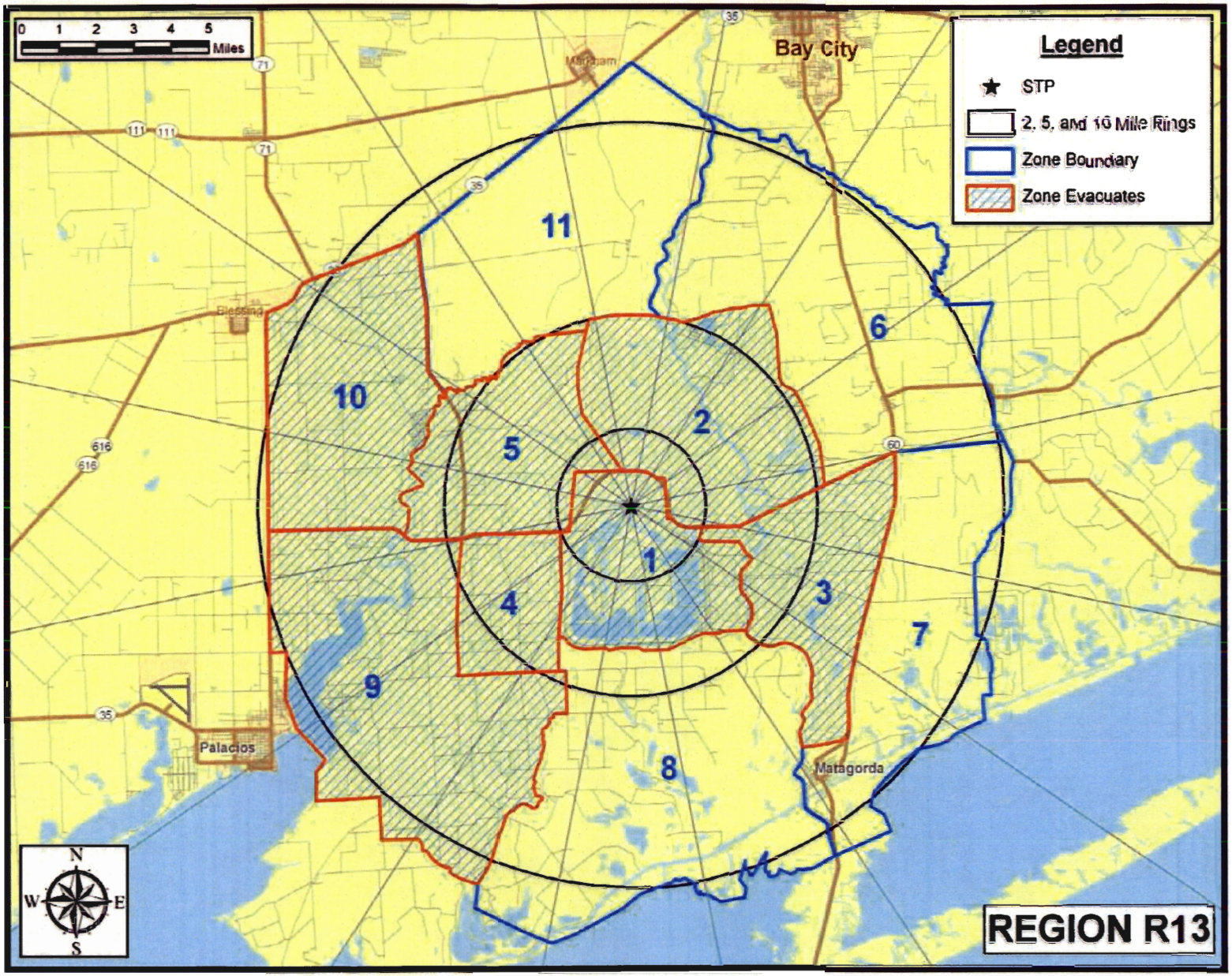
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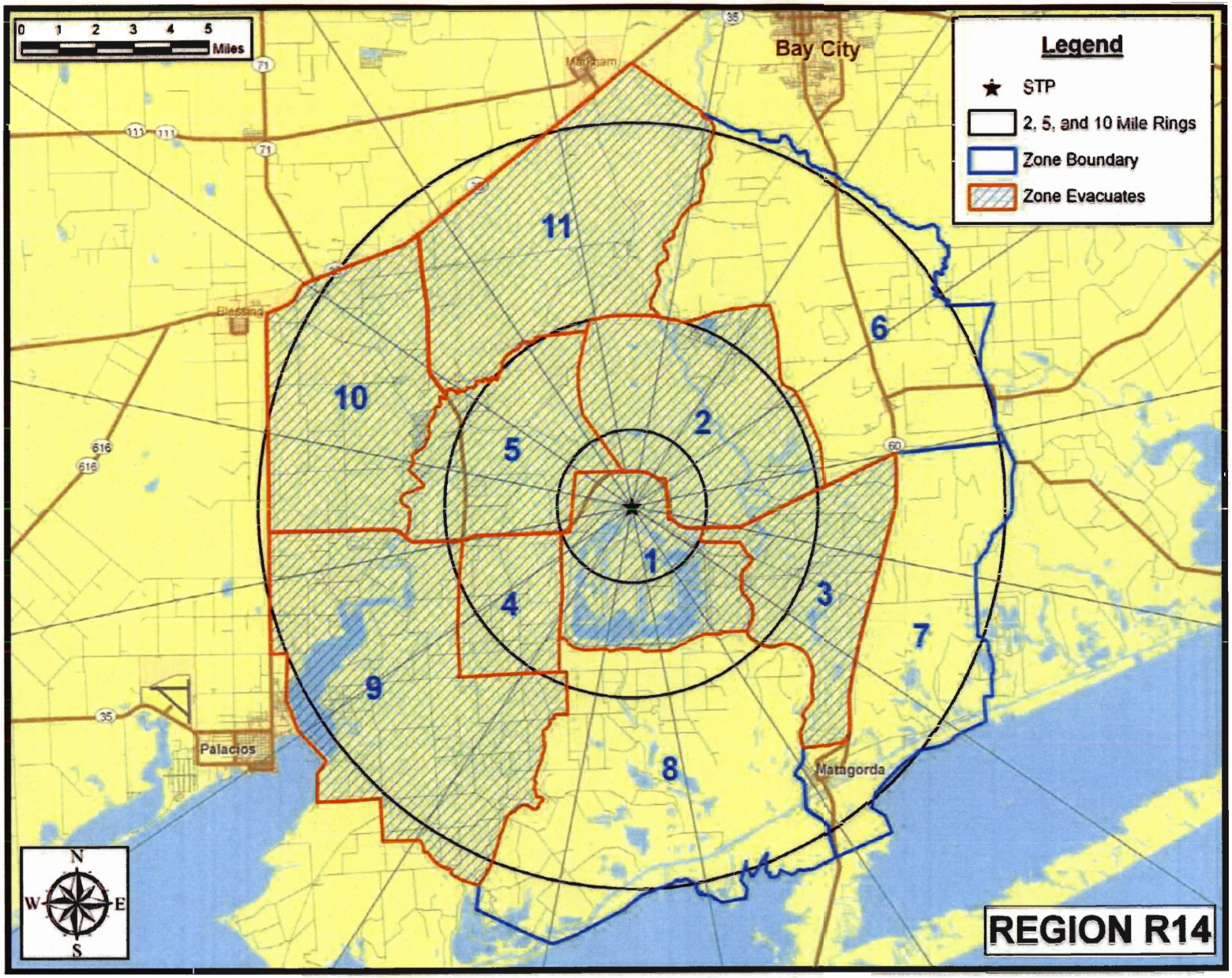
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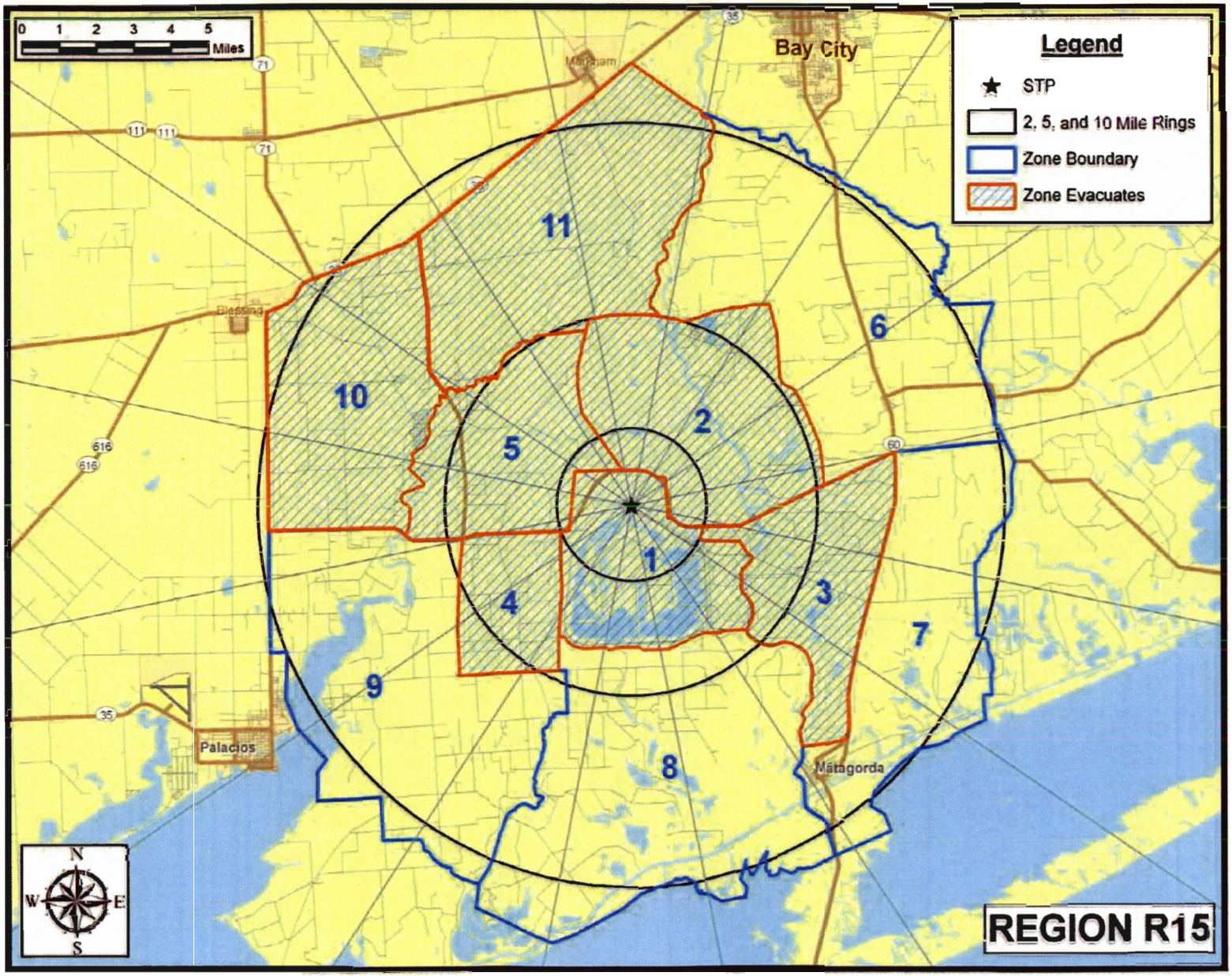
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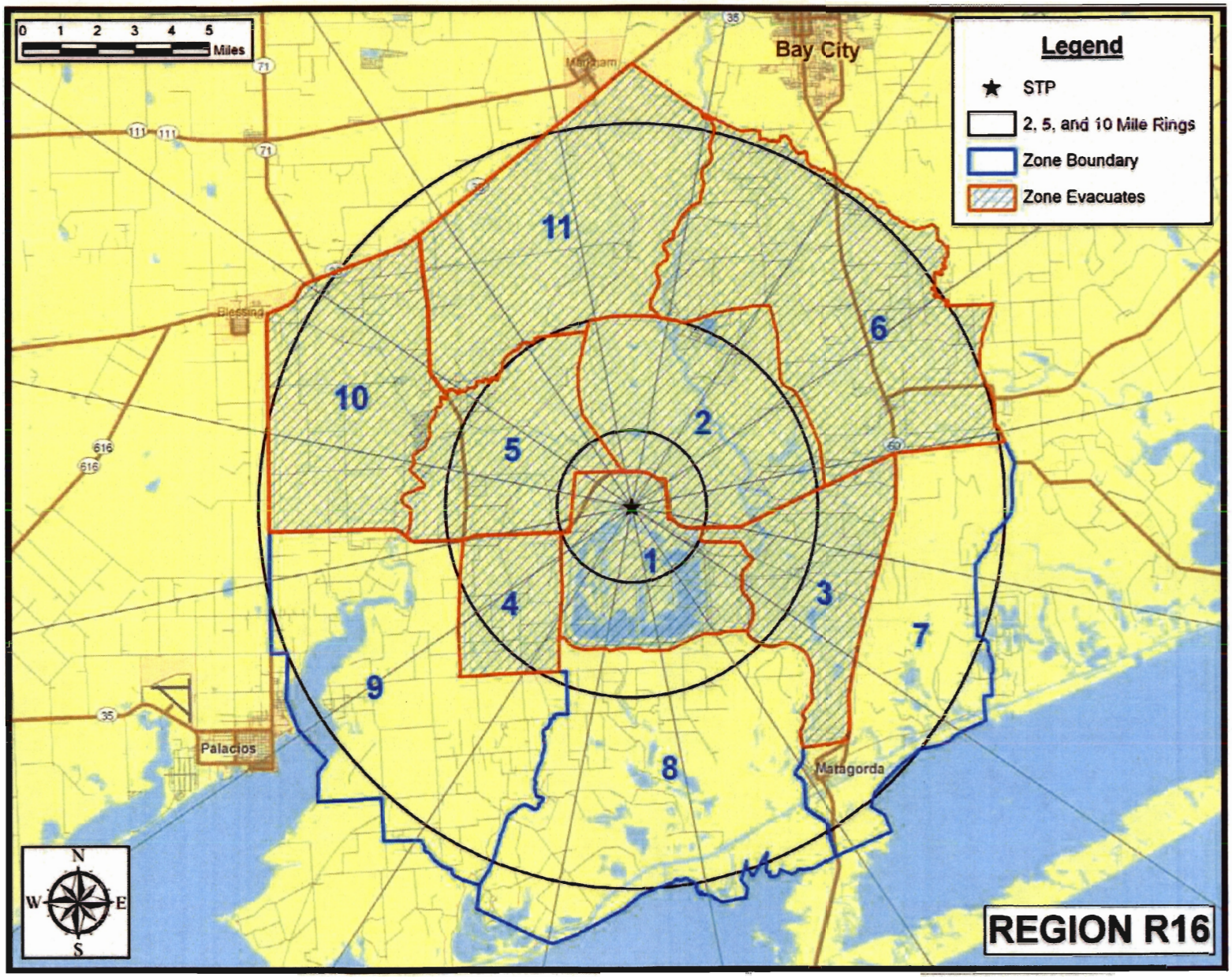
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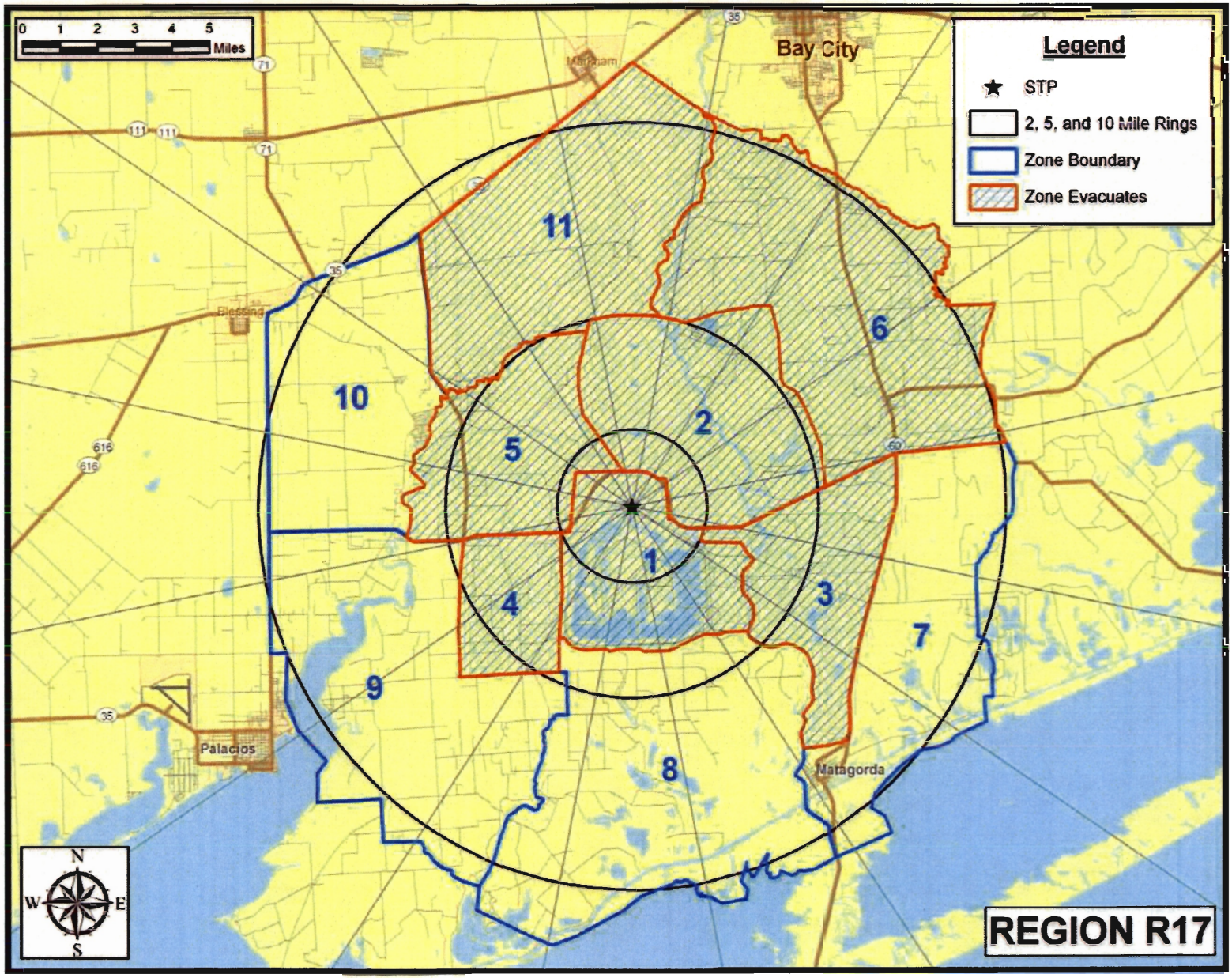
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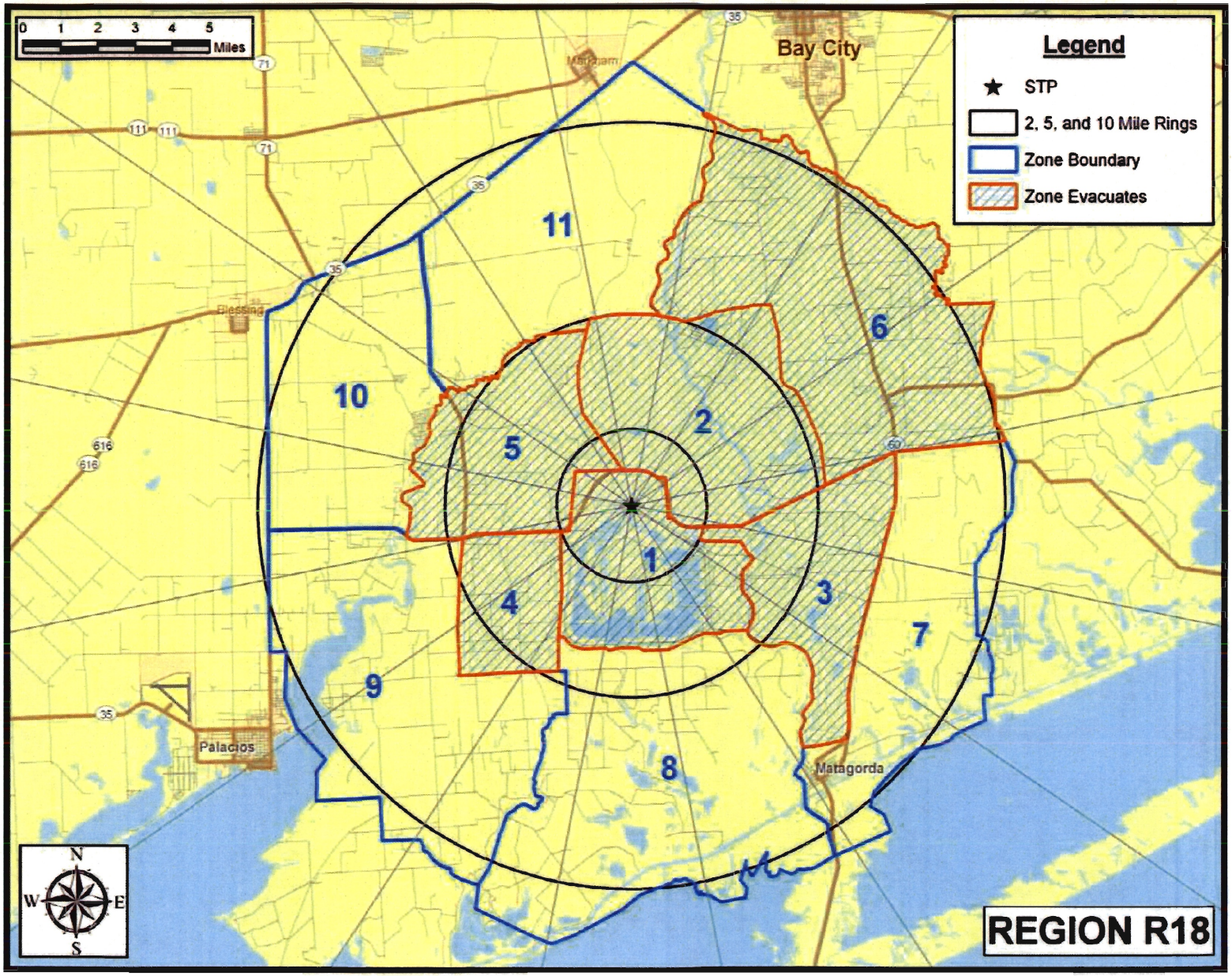
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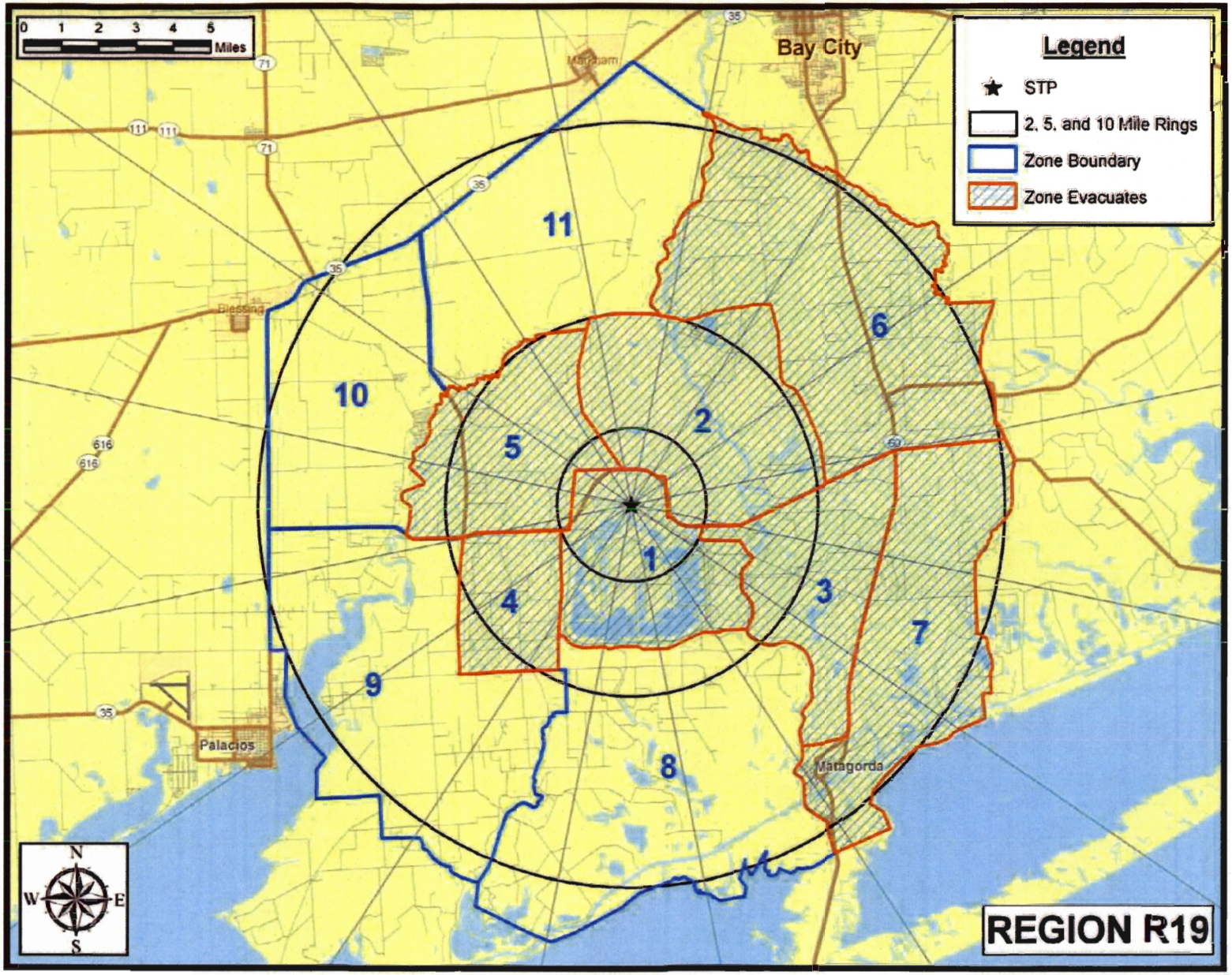
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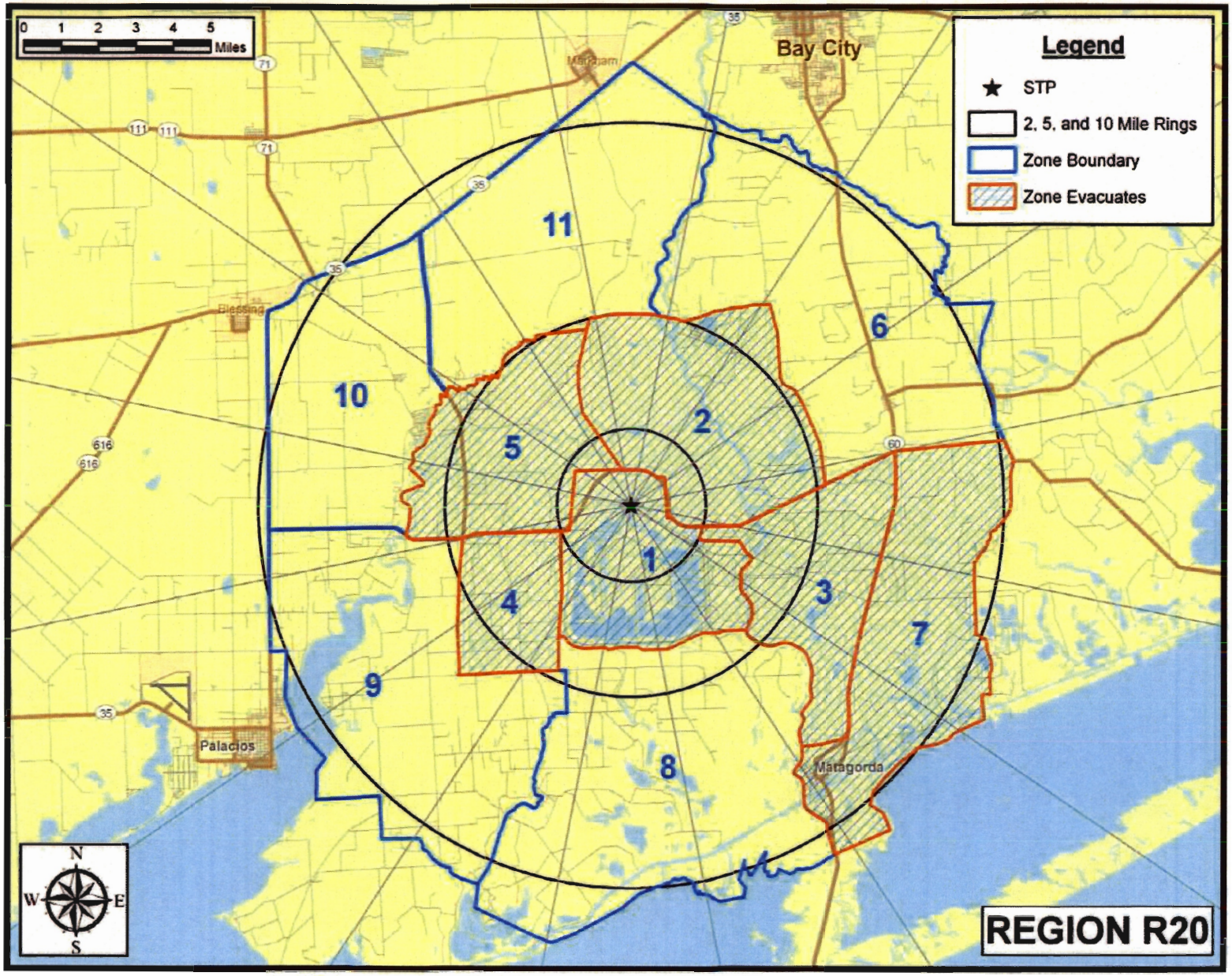
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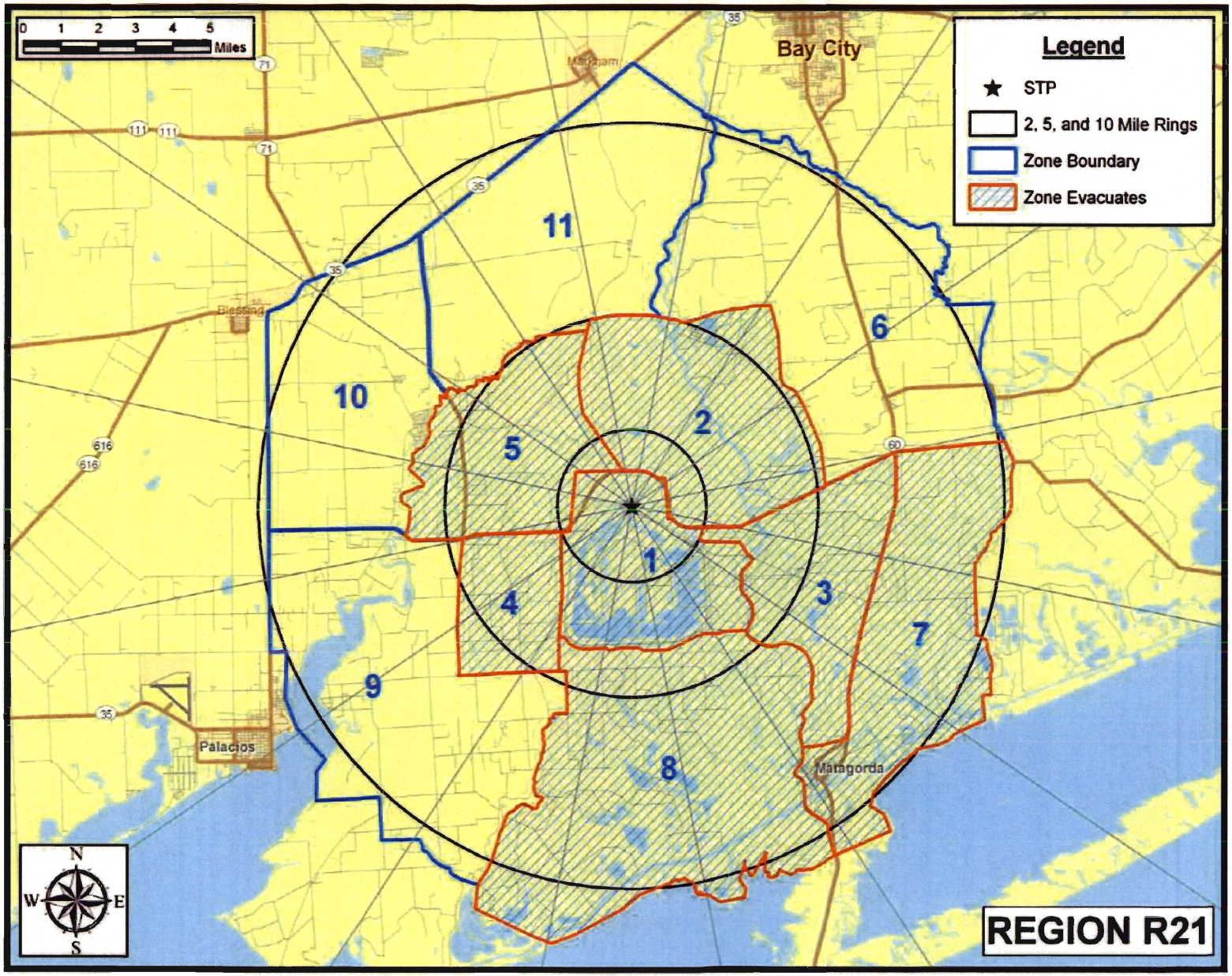
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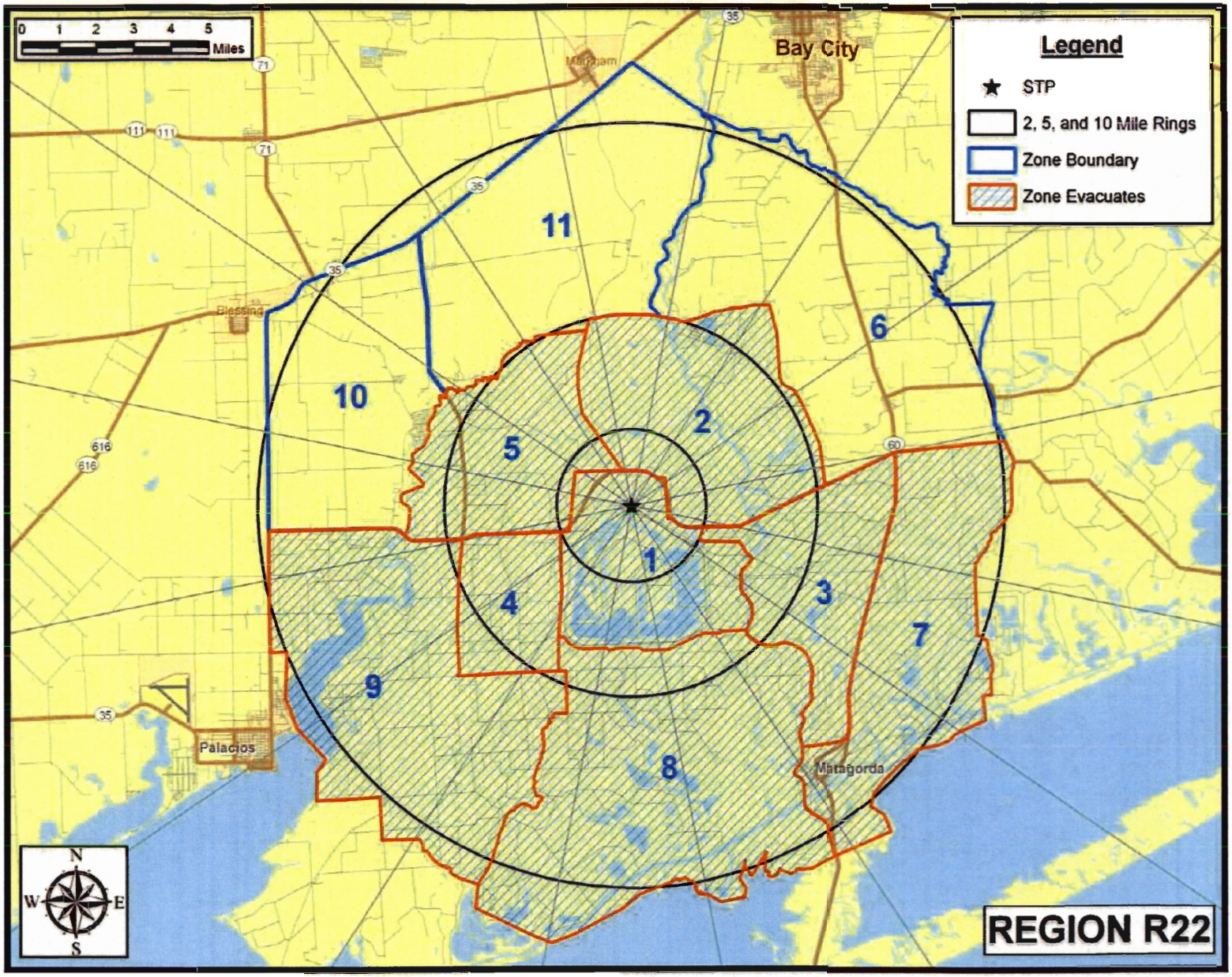
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APPENDIX I

Evacuation Sensitivity Studies

APPENDIX I: EVACUATION SENSITIVITY STUDIES

A sensitivity study was performed to determine whether changes in the estimated trip generation time have an effect upon the Evacuation Time Estimates (ETE) for the entire EPZ. The case considered was Scenario 1, Region 3; a summer, midweek, midday, good weather evacuation of the entire EPZ. Table I-1 presents the results of this study.

Table I-1. Evacuation Time Estimates for Trip Generation Sensitivity Study

	Evacuation Time Estimate		
Trip Generation Period	**2-Mile Region**	**5-Mile Region**	**Entire EPZ**
3 Hours	1:00	3:10	3:10
6 Hours (Base)	1:00	6:00	6:10

As the mobilization time is reduced, the ETE for 2-mile, 5-mile, and the full EPZ reduce accordingly. The results confirm the importance of accurately estimating trip generation times. The evacuation time estimates closely mirror the values for the time the last evacuation trip is generated. The reason for this is the lack of significant traffic congestion during an evacuation. The results indicate that programs to educate the public to encourage faster responses to a radiological emergency, can considerably reduce ETE.

A sensitivity study was also conducted to determine the effects on ETE of changes in the percentage of people who decide to relocate from the Shadow Region. The movement of people in the shadow region has the potential to impede vehicles evacuating from an Evacuation Region within the EPZ. The case considered was Scenario 3, Region 3; a summer, weekend, midday, good weather evacuation of the entire EPZ.

Table I-2 presents the evacuation time estimates for each of these cases. The ETE for the 2-mile, 5-mile and Entire EPZ regions remain unchanged as the percentage of people who decide to relocate from areas within the Shadow Region increases from 15% to 60%. These results indicate that the ETE are not impacted by the "shadow effect" and further illustrates that the ETE are dictated by the mobilization time of the evacuating populous.

Table I-2. Evacuation Time Estimates for Shadow Sensitivity Study

	Evacuation Time Estimate		
Percent Shadow Evacuation	**2-Mile Region**	**5-Mile Region**	**Entire EPZ**
15	1:00	5:10	5:50
30 (Base)	1:00	5:10	5:50
60	1:00	5:10	5:50