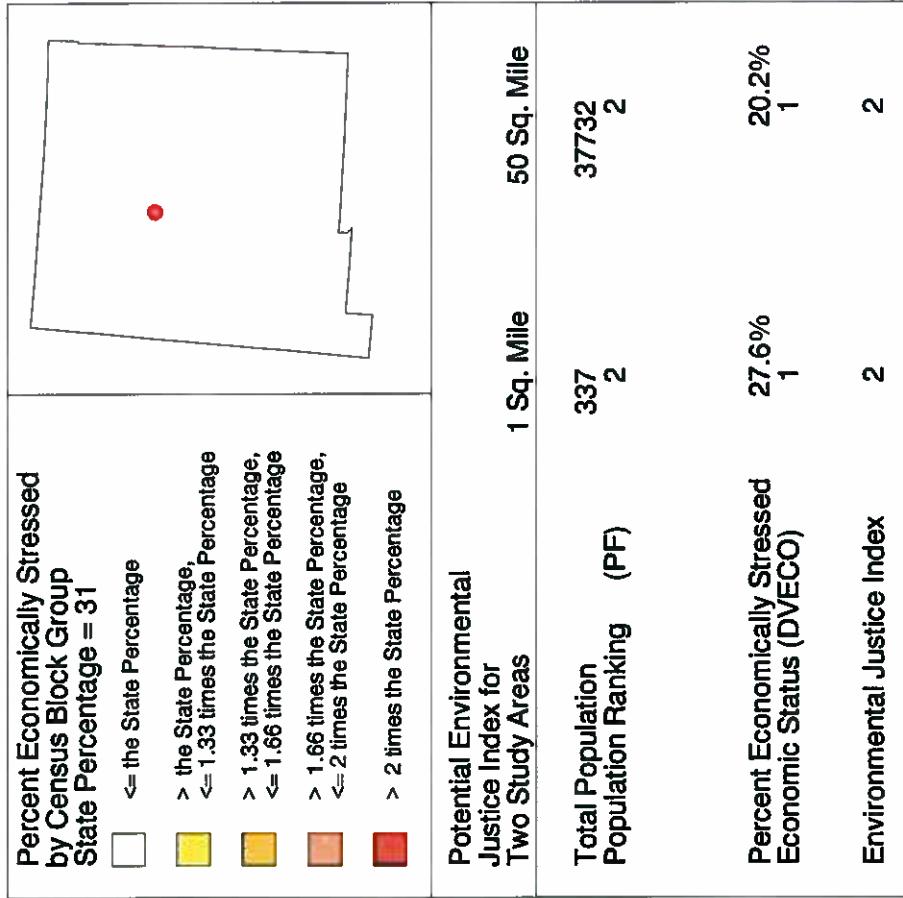
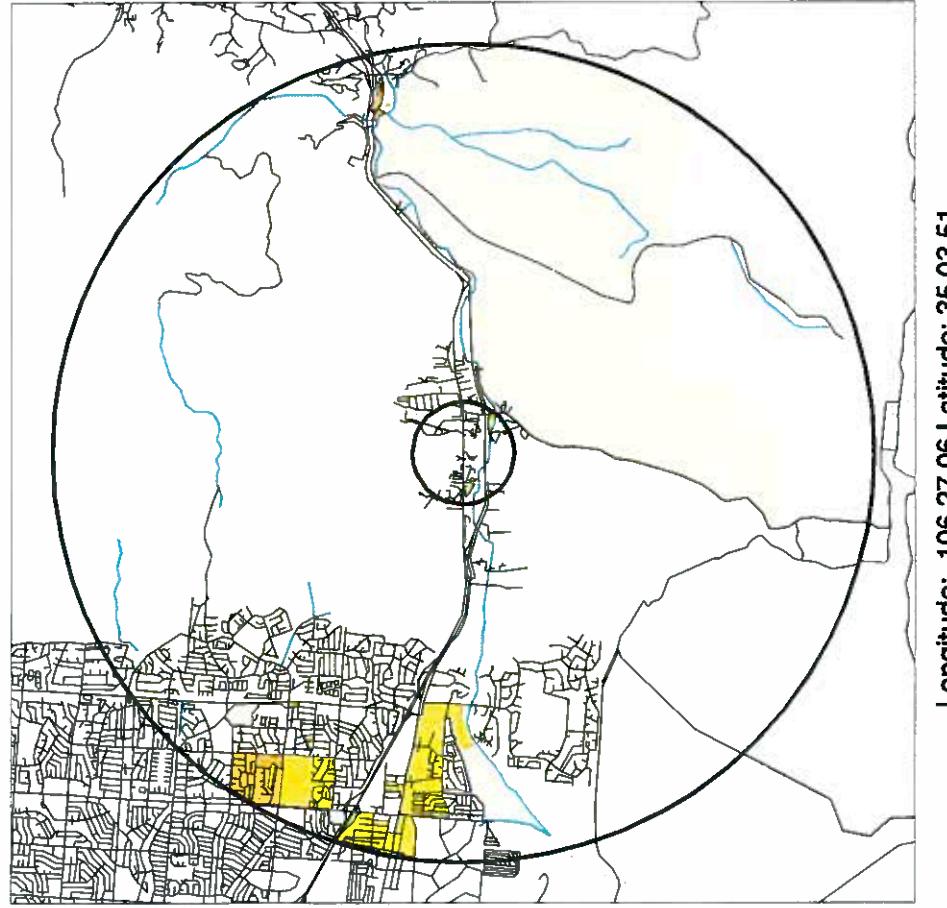


## **Appendix C**

### **Potential Environmental Justice Index**

## Carmel Water Project, Bernalillo county, NM Economic Status - Degree of Vulnerability (DVECO)



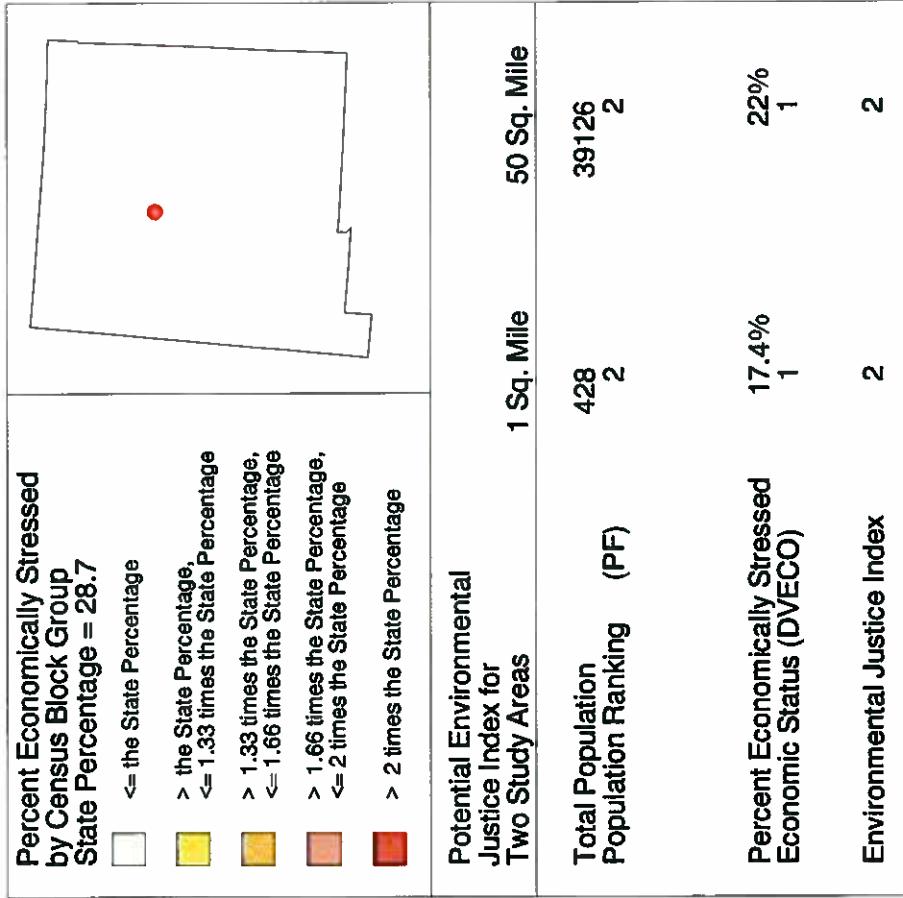
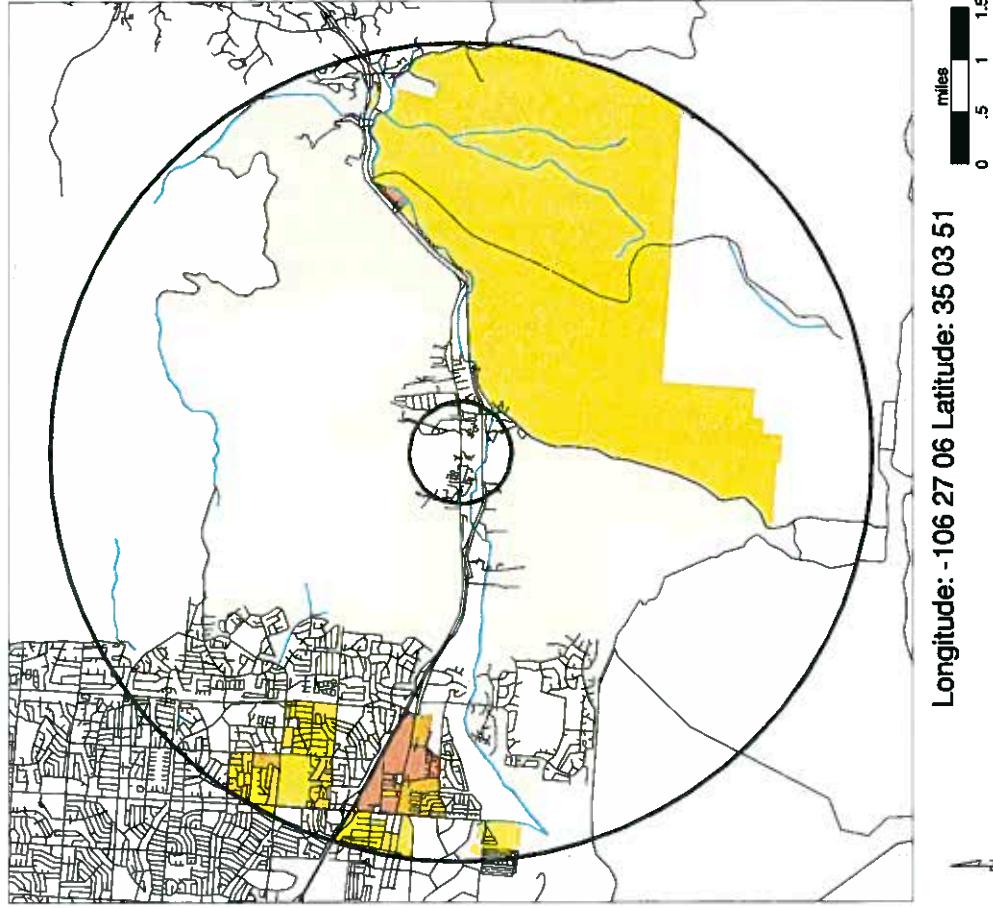
As of October 2005, percent minority is no longer used in the Potential EJ Index calculation.

Data Sources and References: US Bureau of the Census, 1990 PL 94-171 and STF3A Data, and TIGER Files  
US EPA Region 6, 1992. Computer Assisted Environmental Assessment Methodologies, Chapter V. Special Applications, Environmental Equity. Planning and Analysis Section, Management Division, Region 6 EPA, Dallas, Texas



# Carmuel Water Project, Bernalillo county, NM

## Economic Status - Degree of Vulnerability (DVECO)



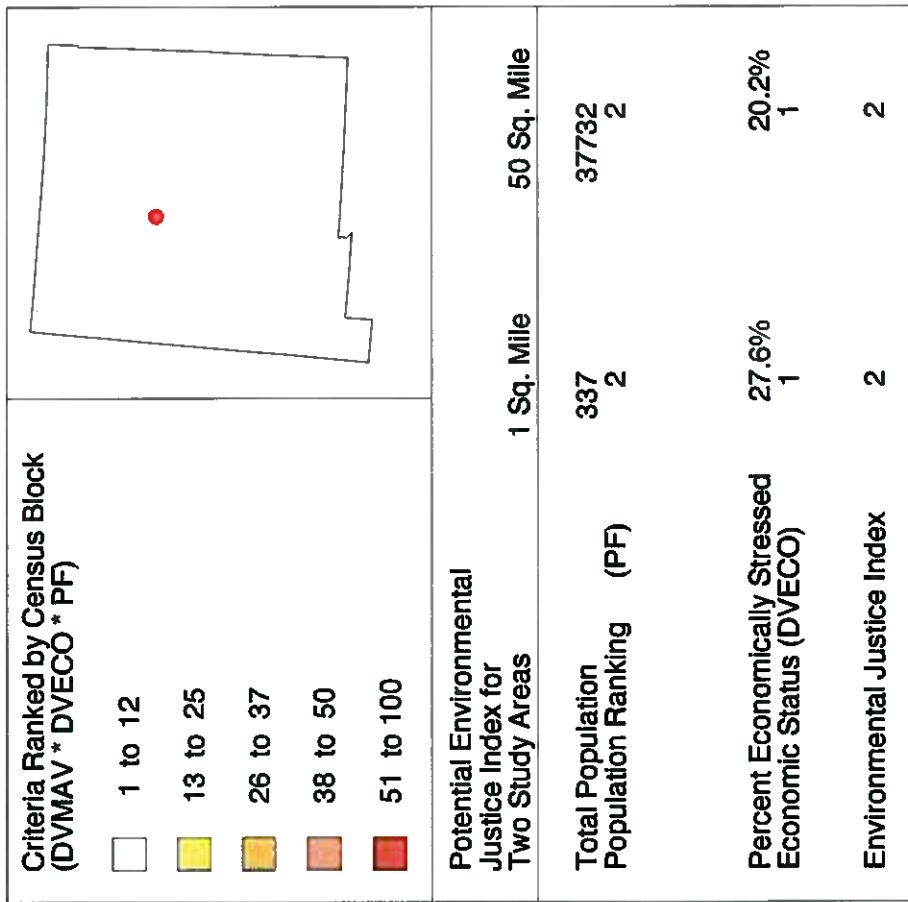
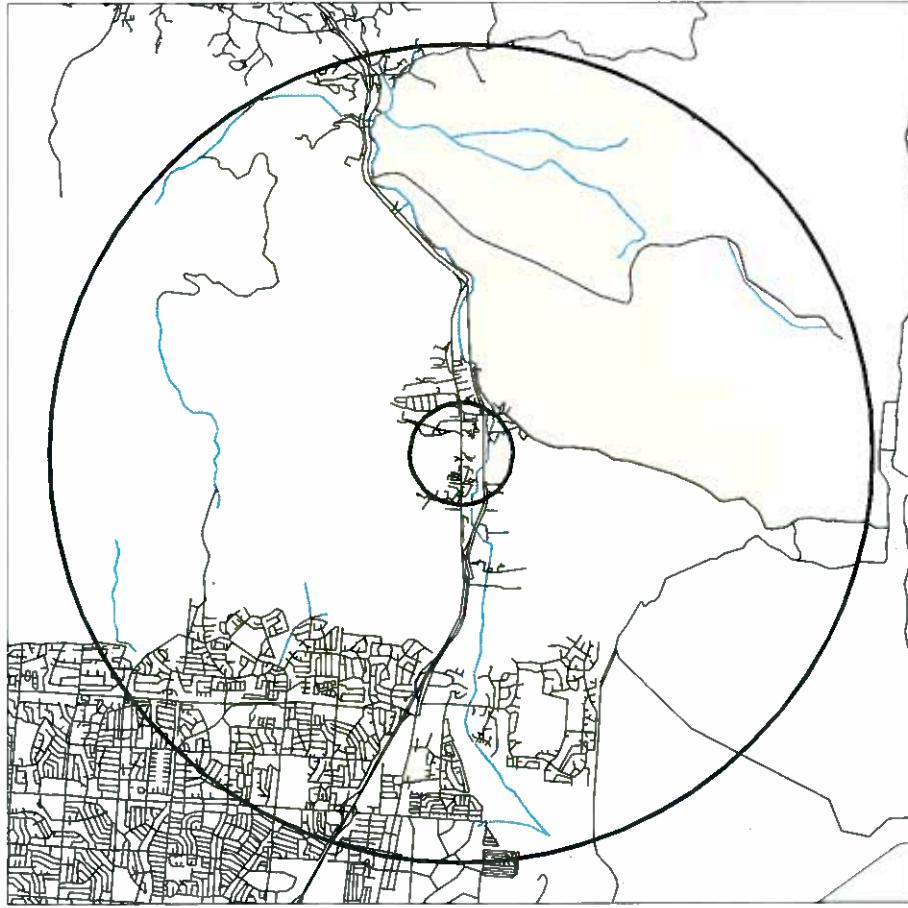
As of October 2005, percent minority is no longer used in the Potential EJ Index calculation.

Data Sources and References: US Bureau of the Census, 2000 PL94-171, SF3 Data, and TIGER Files  
US EPA Region 6, 1992. Computer Assisted Environmental Assessment Methodologies, Chapter V. Special Applications, Environmental Equity. Planning and Analysis Section, Management Division, Region 6 EPA, Dallas, Texas



# Carmel Water Project, Bernalillo county, NM

## Potential Environmental Justice Index (EJ)



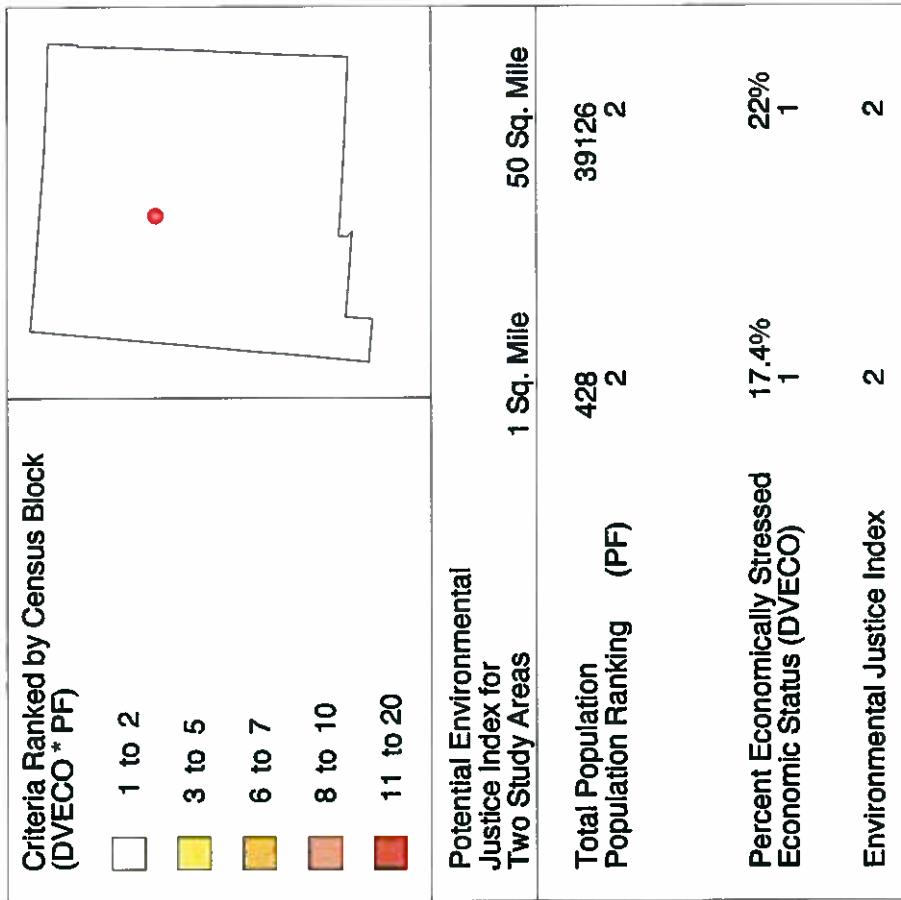
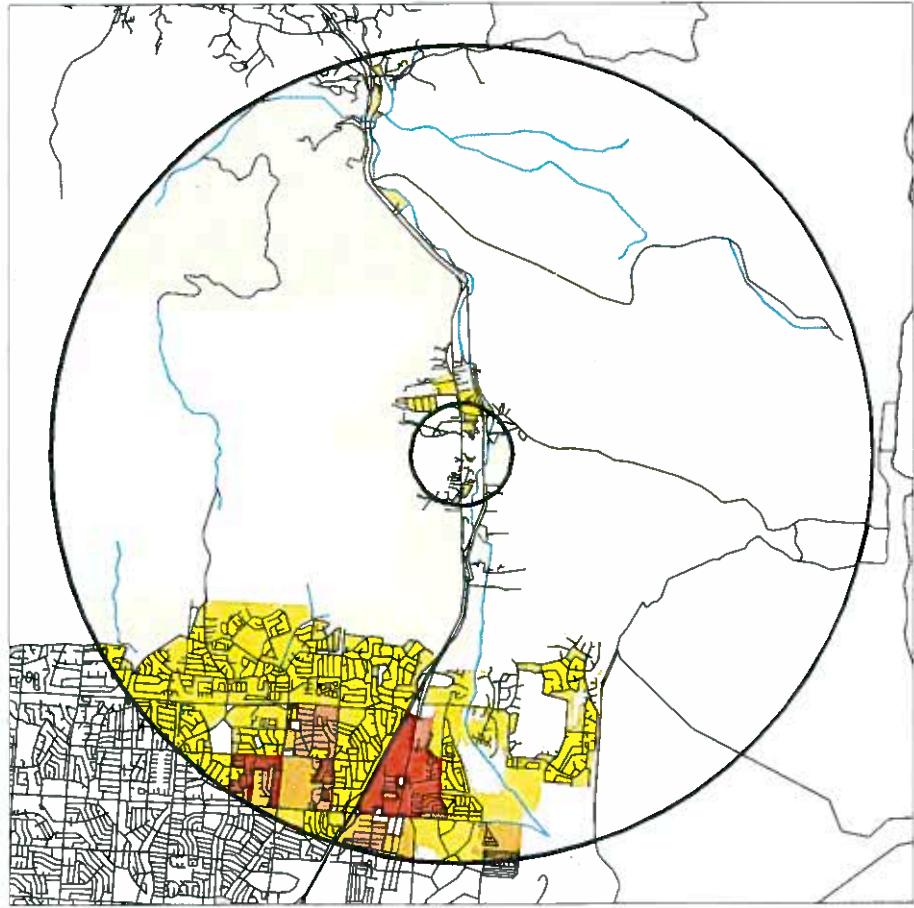
As of October 2005, percent minority is no longer used in the Potential EJ Index calculation.

Data Sources and References: US Bureau of the Census, 1990 PL94-171 and STF3A Data, and TIGER Files  
US EPA Region 6, 1992, Computer Assisted Environmental Assessment Methodologies, Chapter V, Special Applications,  
Environmental Equity, Planning and Analysis Section, Management Division, Region 6 EPA, Dallas, Texas



# Carmuel Water Project, Bernalillo county, NM

## Potential Environmental Justice Index (EJ)



As of October 2005, percent minority is no longer used in the Potential EJ Index calculation.

Data Sources and References: US Bureau of the Census, 2000 PL94-171, SF3 Data, and TIGER Files  
 US EPA Region 6, 1992. Computer Assisted Environmental Assessment Methodologies, Chapter V. Special Applications, Environmental Equity. Planning and Analysis Section, Management Division, Region 6 EPA, Dallas, Texas



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POTENTIAL ENVIRONMENTAL JUSTICE (EJ) INDEX PILOT

Date : 22 Apr 09 15:29:36 Wednesday  
Requestor : DON 6WQNI  
Site Id Number : NMCARNUEL  
Site Name : CARNUEL PROJECT  
County : BERNALILLO  
State/County FIPS Code : 35001  
Location : -106 27 6 35 3 51  
Quality Assurance Resource : 1

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CARNUEL PROJECT  
1990 - 50 square mile study area

Economic Ranking Value (DVECO) : 1 Percent Economically Stressed =  
20.2  
Population Ranking Value (PF) : 2 Total Population =  
37732

Potential Environmental Justice Index (DVECO \* PF) = 2

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CARNUEL PROJECT  
2000 - 50 square mile study area

Economic Ranking Value (DVECO) : 1 Percent Economically Stressed =  
22  
Population Ranking Value (PF) : 2 Total Population =  
39126

Potential Environmental Justice Index (DVECO \* PF) = 2

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CARNUEL PROJECT  
1990 - 1 square mile study area

Economic Ranking Value (DVECO) : 1      Percent Economically Stressed =  
27.6  
Population Ranking Value (PF) : 2      Total Population                        =  
337

Potential Environmental Justice Index (DVECO \* PF) = 2

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CARNUEL PROJECT  
2000 - 1 square mile study area

Economic Ranking Value (DVECO) : 1      Percent Economically Stressed =  
17.4  
Population Ranking Value (PF) : 2      Total Population                        =  
428

Potential Environmental Justice Index (DVECO \* PF) = 2

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POTENTIAL ENVIRONMENTAL JUSTICE (EJ) INDEX PILOT

The Potential Environmental Justice Index, or the independent subfactors comprising

the index, should be used as a DEMOGRAPHIC CORRELATION VARIABLE for studies conducted

by the PROGRAMS. These studies may be used to measure Agency policies or procedures

regarding sociological equity for enforcement or permitting activities. The information

given in this report does not represent the final analysis of a site in regard to

Environmental Justice or RISK. The indices and raw data reported are indicators of

Vulnerability for subgroups of people to other stressors.

## METHODOLOGY CRITERIA

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Environmental Justice Indexes are indicators of potential EJ concern. 2000 Census data for a Study Area is evaluated and ranked in relationship to state percentages. Ranking variables are multiplied to produce an index for prioritizing applications. The ranking variables are:

- ~ Economic Status, Degree of Vulnerability (DVECO),
- ~ and Total Population, Population Factor (PF).

~ECONOMIC STATUS (DVECO) - In 1990, Economically Stressed was defined as Households making less than \$15,000 a year. For NM the percent economically stressed was 31%. In 2000, Economically Stressed is defined as households making less than \$20,000 a year. For NM the percent economically stressed was 28.7.

The Methodology for ranking values associated with Degrees of Vulnerability is

Ranking	Criteria
1	<= the State Percentage
2	> the State Percentage but <= 1.33 times the State Percentage
3	> 1.33 times the State Percentage but <= 1.66 times the State Percentage
4	> 1.66 times the State Percentage but <= 1.99 times the State Percentage
5	>= 2 times the State Percentage

~POPULATION RANKING FACTOR Total Population is ranked using the following criteria.

Ranking	Criteria	(evaluated on a 1 square mile basis)
0	Total Population = 0	
1	Total Population > 0 and < 200	
2	Total Population > 200 and < 1000	
3	Total Population > 1000 and < 5000	
4	Total Population > 5000	

### Reference for Quality Assurance Resources

1	Personal Verification	7	AIRS
2	Reconciliation with Quad maps	8	PCS
3	Reported from archived files	9	GIS Verified
4	TRIS	10	Professional Judgement
5	RCRIS	11	Federal Facility Tracking
System			
6	CERCLIS	12	Dun & Bradstreet