

Appendix B: Land Evaluation and Site Assessment Model

Land Evaluation Worksheet

**Land Capability Classification (LCC)
and Storie Index Scores**

| A | B | C | D | E | F | G | H |
|-------------------------------|---------------|----------------------------|-----|------------------------|-----------|---------------------------------|--------------------|
| Soil Map Unit | Project Acres | Proportion of Project Area | LCC | LCC Rating | LCC Score | Storie Index | Storie Index Score |
| 254- Timor loamy sand | 62.44 | 0.20 | 3s | 60 | 12.3 | 67 | 13.7 |
| 255- Tinnin loamy coarse sand | 18.72 | 0.06 | 3s | 60 | 3.7 | 0 | 0.0 |
| 266- Veritas fine sandy loam | 223.81 | 0.73 | 2s | 80 | 58.7 | 86 | 63.1 |
| Totals | 304.97 | 1.00 | | LCC Total Score | 75 | Storie Index Total Score | 77 |

Site Assessment Worksheet 1

Project Size Score

| I | J | K |
|------------------|---------------|---------------------|
| LCC Class I - II | LCC Class III | LCC Class IV - VIII |
| | 62.44 | |
| | 18.72 | |
| 223.81 | | |
| 223.81 | 81.16 | 0 |
| 100 | 80 | 0 |

Total Acres Project Size Scores

Highest Project Size Score

100

Table 2. Numeric Conversion of Land Capability Classification Units

| Land Capability Classification | LCC Point Rating |
|--------------------------------|------------------|
| I | 100 |
| Ile | 90 |
| IIs,w | 80 |
| IIle | 70 |
| IIIs,w | 60 |
| IVe | 50 |
| IVs,w | 40 |
| V | 30 |
| VI | 20 |
| VII | 10 |
| VIII | 0 |

Table 3. Project Size Scoring

| LCC Class I or II soils | | LCC Class III soils | | LCC Class IV or lower | |
|-------------------------|-------|---------------------|-------|-----------------------|-------|
| Acres | Score | Acres | Score | Acres | Score |
| 80 or above | 100 | 160 or above | 100 | 320 or above | 100 |
| 60-79 | 90 | 120-159 | 90 | 240-319 | 80 |
| 40-59 | 80 | 80-119 | 80 | 160-239 | 60 |
| 20-39 | 50 | 60-79 | 70 | 100-159 | 40 |
| 10-19 | 30 | 40-59 | 60 | 40-99 | 20 |
| fewer than 10 | 0 | 20-39 | 30 | fewer than 40 | 0 |
| | | 10-19 | 10 | | |
| | | fewer than 10 | 0 | | |

Source of Table 2 and Table 3: California Land Evaluation and Site Assessment Model Instruction Manual, 1997

Site Assessment Worksheet 2 - Water Resources Availability

| A | B | C | D | E |
|-----------------|---------------------------|----------------------------|-----------------------------------|-------------------------------------|
| Project Portion | Water Source | Proportion of Project Area | Water Availability Score | Weighted Availability Score (C x D) |
| 1 | Irrigation District Water | 1 | 80 | 80 |
| 2 | | | | |
| | | (Must Sum to 1.0) | Total Water Resource Score | 80 |

Table 5. Water Resource Availability Scoring

| Option | Non-Drought Years | | | Drought Years | | | WATER RESOURCE SCORE |
|--------|---|-------------------------|-------------------------|--------------------------------|-------------------------|-------------------------|----------------------|
| | RESTRICTIONS | | | RESTRICTIONS | | | |
| | Irrigated Production Feasible? | Physical Restrictions ? | Economic Restrictions ? | Irrigated Production Feasible? | Physical Restrictions ? | Economic Restrictions ? | |
| 1 | YES | NO | NO | YES | NO | NO | 100 |
| 2 | YES | NO | NO | YES | NO | YES | 95 |
| 3 | YES | NO | YES | YES | NO | YES | 90 |
| 4 | YES | NO | NO | YES | YES | NO | 85 |
| 5 | YES | NO | NO | YES | YES | YES | 80 |
| 6 | YES | YES | NO | YES | YES | NO | 75 |
| 7 | YES | YES | YES | YES | YES | YES | 65 |
| 8 | YES | NO | NO | NO | -- | -- | 50 |
| 9 | YES | NO | YES | NO | -- | -- | 45 |
| 10 | YES | YES | NO | NO | -- | -- | 35 |
| 11 | YES | YES | YES | NO | -- | -- | 30 |
| 12 | Irrigated production not feasible, but rainfall adequate for dryland production in both drought and non-drought years | | | | | | 25 |
| 13 | Irrigated production not feasible, but rainfall adequate for dryland production in non-drought years (but not in drought years) | | | | | | 20 |
| 14 | Neither irrigated nor dryland production feasible | | | | | | 0 |

Source of Table 5: California Land Evaluation and Site Assessment Model Instruction Manual, 1997

Site Assessment Worksheet 3

Surrounding Agricultural Land and Surrounding Protected Resource Land

| A | B | C | D | E | F | G |
|--------------------------|----------------------|----------------------------------|------------------------------|---------------------------------------|--|--|
| Zone of Influence | | | | | | |
| Total Acres | Acres in Agriculture | Acres of Protected Resource Land | Percent in Agriculture (B/A) | Percent Protected Resource Land (C/A) | Surrounding Agricultural Land Score (From Table) | Surrounding Protected Resource Land Score (From Table) |
| 2459 | 1316 | 120 | 53.5% | 5% | 40 | 0 |

Table 6. Surrounding Agricultural Land Rating

| Percent of Project's Zone of Influence in Agricultural Use | Surrounding Agricultural Land Score |
|--|-------------------------------------|
| 90 - 100% | 100 Points |
| 80 - 89 | 90 |
| 75 - 79 | 80 |
| 70 - 74 | 70 |
| 65 - 69 | 60 |
| 60 - 64 | 50 |
| 55 - 59 | 40 |
| 50 - 54 | 30 |
| 45 - 49 | 20 |
| 40 - 44 | 10 |
| 40 < | 0 |

Table 7. Surrounding Protected Resource Land Rating

| Percent of Project's Zone of Influence Defined as Protected | Surrounding Protected Resource Land Score |
|---|---|
| 90 - 100% | 100 Points |
| 80 - 89 | 90 |
| 75 - 79 | 80 |
| 70 - 74 | 70 |
| 65 - 69 | 60 |
| 60 - 64 | 50 |
| 55 - 59 | 40 |
| 50 - 54 | 30 |
| 45 - 49 | 20 |
| 40 - 44 | 10 |
| 40 < | 0 |

Source of Table 6 and Table 7: California Land Evaluation and Site Assessment Model Instruction Manual, 1997

Final LESA Score Sheet

Calculation of the Final LESA Score:

- (1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores Column.
- (2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
- (3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
- (4) Sum the total LE and SA scores to determine the Final LESA Score for the Project.

| | Factor Scores | Factor Weight | Weighted Factor Scores |
|--------------------------------|---------------|---------------|------------------------|
| <u>LE Factors</u> | | | |
| Land Capability Classification | 75 | 0.25 | 19 |
| Storie Index | 77 | 0.25 | 19 |
| <i>LE Subtotal</i> | | 0.50 | 38 |
| <u>SA Factors</u> | | | |
| Project Size | 100 | 0.15 | 15.0 |
| Water Resource Availability | 80 | 0.15 | 12.0 |
| Surrounding Agricultural Land | 40 | 0.15 | 6.0 |
| Protected Resource Land | 0 | 0.05 | 0.0 |
| <i>SA Subtotal</i> | | 0.50 | 33.0 |
| Final LESA Score | | | 71 |

Impact Determination Significant

Table 9. California LESA Model Scoring Thresholds

| Total LESA Score | Scoring Decision |
|------------------|---|
| 0 to 39 Points | Not Considered Significant |
| 40 to 59 Points | Considered Significant <u>only</u> if LE <u>and</u> SA subscores are each <u>greater</u> than or equal to 20 points |
| 60 to 79 Points | Considered Significant <u>unless</u> either LE <u>or</u> SA subscore is <u>less</u> than 20 points |
| 80 to 100 Points | Considered Significant |

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| Source of Table 9: California Land Evaluation and Site Assessment Model Instruction Manual, 1997 |
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