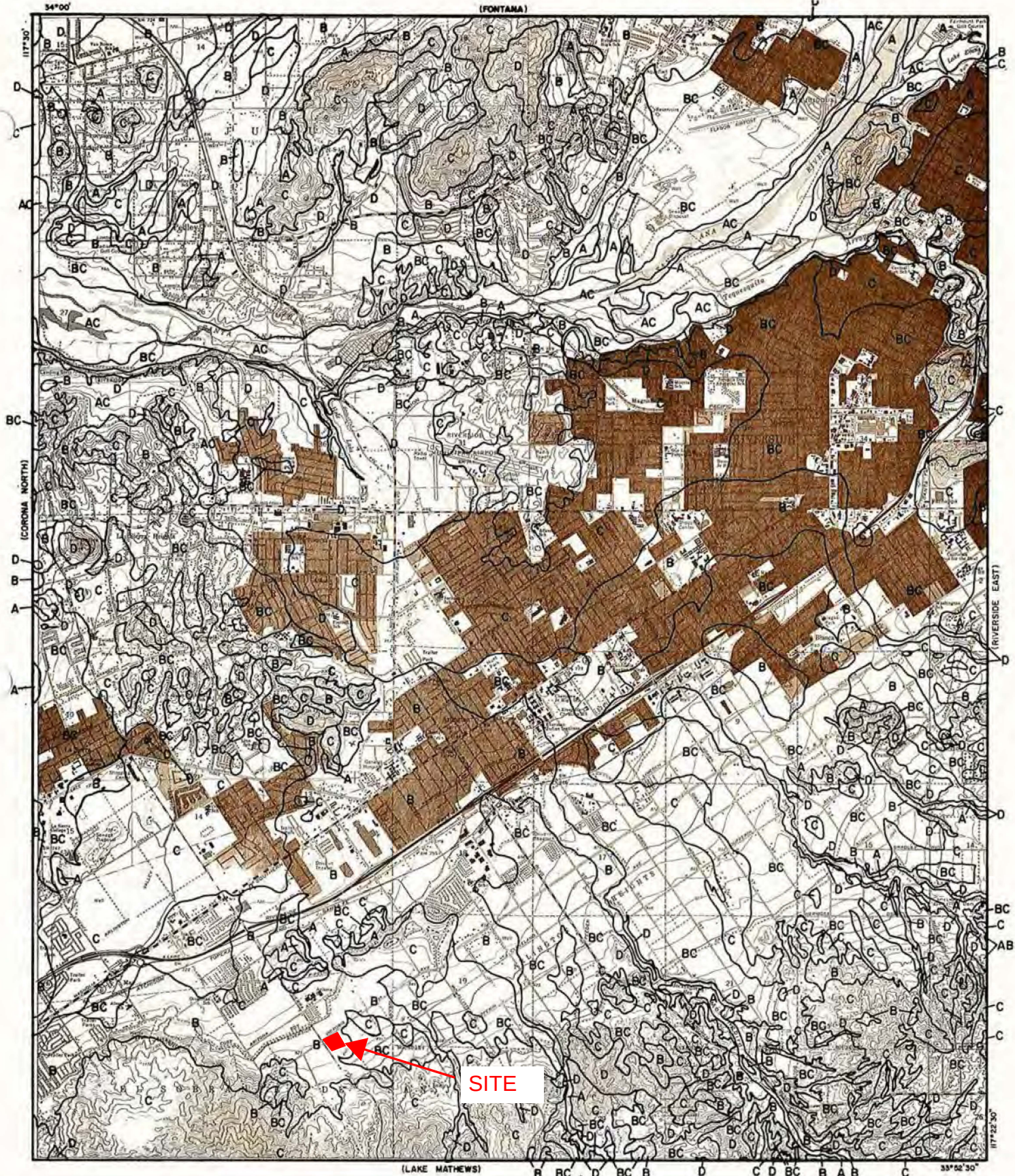


**RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II**

| Cover Type (3)                                                                                                | Quality of Cover (2) | Soil Group |    |    |    |
|---------------------------------------------------------------------------------------------------------------|----------------------|------------|----|----|----|
|                                                                                                               |                      | A          | B  | C  | D  |
| <u>NATURAL COVERS -</u>                                                                                       |                      |            |    |    |    |
| Barren<br>(Rockland, eroded and graded land)                                                                  |                      | 78         | 86 | 91 | 93 |
| Chaparrel, Broadleaf<br>(Manzonita, ceanothus and scrub oak)                                                  | Poor                 | 53         | 70 | 80 | 85 |
|                                                                                                               | Fair                 | 40         | 63 | 75 | 81 |
|                                                                                                               | Good                 | 31         | 57 | 71 | 78 |
| Chaparrel, Narrowleaf<br>(Chamise and redshank)                                                               | Poor                 | 71         | 82 | 88 | 91 |
|                                                                                                               | Fair                 | 55         | 72 | 81 | 86 |
| Grass, Annual or Perennial                                                                                    | Poor                 | 67         | 78 | 86 | 89 |
|                                                                                                               | Fair                 | 50         | 69 | 79 | 84 |
|                                                                                                               | Good                 | 38         | 61 | 74 | 80 |
| Meadows or Cienegas<br>(Areas with seasonally high water table,<br>principal vegetation is sod forming grass) | Poor                 | 63         | 77 | 85 | 88 |
|                                                                                                               | Fair                 | 51         | 70 | 80 | 84 |
|                                                                                                               | Good                 | 30         | 58 | 72 | 78 |
| Open Brush<br>(Soft wood shrubs - buckwheat, sage, etc.)                                                      | Poor                 | 62         | 76 | 84 | 88 |
|                                                                                                               | Fair                 | 46         | 66 | 77 | 83 |
|                                                                                                               | Good                 | 41         | 63 | 75 | 81 |
| Woodland<br>(Coniferous or broadleaf trees predominate.<br>Canopy density is at least 50 percent)             | Poor                 | 45         | 66 | 77 | 83 |
|                                                                                                               | Fair                 | 36         | 60 | 73 | 79 |
|                                                                                                               | Good                 | 28         | 55 | 70 | 77 |
| Woodland, Grass<br>(Coniferous or broadleaf trees with canopy<br>density from 20 to 50 percent)               | Poor                 | 57         | 73 | 82 | 86 |
|                                                                                                               | Fair                 | 44         | 65 | 77 | 82 |
|                                                                                                               | Good                 | 33         | 58 | 72 | 79 |
| <u>URBAN COVERS -</u>                                                                                         |                      |            |    |    |    |
| Residential or Commercial Landscaping<br>(Lawn, shrubs, etc.)                                                 | Good                 | 32         | 56 | 69 | 75 |
| Turf<br>(Irrigated and mowed grass)                                                                           | Poor                 | 58         | 74 | 83 | 87 |
|                                                                                                               | Fair                 | 44         | 65 | 77 | 82 |
|                                                                                                               | Good                 | 33         | 58 | 72 | 79 |
| <u>AGRICULTURAL COVERS -</u>                                                                                  |                      |            |    |    |    |
| Fallow<br>(Land plowed but not tilled or seeded)                                                              |                      | 76         | 85 | 90 | 92 |

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**RUNOFF INDEX NUMBERS  
FOR  
PERVIOUS AREA**

# RUNOFF INDEX NUMBERS OF HYDROLOGIC SOIL-COVER COMPLEXES FOR PERVIOUS AREAS-AMC II

| Cover Type (3)                                                  | Quality of<br>Cover (2) | Soil Group |    |    |    |
|-----------------------------------------------------------------|-------------------------|------------|----|----|----|
|                                                                 |                         | A          | B  | C  | D  |
| <u>AGRICULTURAL COVERS</u> (cont.) -                            |                         |            |    |    |    |
| Legumes, Close Seeded<br>(Alfalfa, sweetclover, timothy, etc.)  | Poor                    | 66         | 77 | 85 | 89 |
|                                                                 | Good                    | 58         | 72 | 81 | 85 |
| Orchards, Deciduous<br>(Apples, apricots, pears, walnuts, etc.) |                         | See Note 4 |    |    |    |
| Orchards, Evergreen<br>(Citrus, avocados, etc.)                 | Poor                    | 57         | 73 | 82 | 86 |
|                                                                 | Fair                    | 44         | 65 | 77 | 82 |
|                                                                 | Good                    | 33         | 58 | 72 | 79 |
| Pasture, Dryland<br>(Annual grasses)                            | Poor                    | 67         | 78 | 86 | 89 |
|                                                                 | Fair                    | 50         | 69 | 79 | 84 |
|                                                                 | Good                    | 38         | 61 | 74 | 80 |
| Pasture, Irrigated<br>(Legumes and perennial grass)             | Poor                    | 58         | 74 | 83 | 87 |
|                                                                 | Fair                    | 44         | 65 | 77 | 82 |
|                                                                 | Good                    | 33         | 58 | 72 | 79 |
| Row Crops<br>(Field crops - tomatoes, sugar beets, etc.)        | Poor                    | 72         | 81 | 88 | 91 |
|                                                                 | Good                    | 67         | 78 | 85 | 89 |
| Small Grain<br>(Wheat, oats, barley, etc.)                      | Poor                    | 65         | 76 | 84 | 88 |
|                                                                 | Good                    | 63         | 75 | 83 | 87 |
| Vineyard                                                        |                         | See Note 4 |    |    |    |

## Notes:

1. All runoff index (RI) numbers are for Antecedent Moisture Condition (AMC) II.
2. Quality of cover definitions:  
 Poor-Heavily grazed or regularly burned areas. Less than 50 percent of the ground surface is protected by plant cover or brush and tree canopy.  
 Fair-Moderate cover with 50 percent to 75 percent of the ground surface protected.  
 Good-Heavy or dense cover with more than 75 percent of the ground surface protected.
3. See Plate C-2 for a detailed description of cover types.
4. Use runoff index numbers based on ground cover type. See discussion under "Cover Type Descriptions" on Plate C-2.
5. Reference Bibliography item 17.

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**RUNOFF INDEX NUMBERS  
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ACTUAL IMPERVIOUS COVER

| Land Use (1)                                   | Range-Percent | Recommended Value<br>For Average<br>Conditions-Percent(2) |
|------------------------------------------------|---------------|-----------------------------------------------------------|
| Natural or Agriculture                         | 0 - 10        | 0                                                         |
| Single Family Residential: (3)                 |               |                                                           |
| 40,000 S. F. (1 Acre) Lots                     | 10 - 25       | 20                                                        |
| 20,000 S. F. (½ Acre) Lots                     | 30 - 45       | 40                                                        |
| 7,200 - 10,000 S. F. Lots                      | 45 - 55       | 50                                                        |
| Multiple Family Residential:                   |               |                                                           |
| Condominiums                                   | 45 - 70       | 65                                                        |
| Apartments                                     | 65 - 90       | 80                                                        |
| Mobile Home Park                               | 60 - 85       | 75                                                        |
| Commercial, Downtown<br>Business or Industrial | 80 -100       | 90                                                        |

Notes:

1. Land use should be based on ultimate development of the watershed. Long range master plans for the County and incorporated cities should be reviewed to insure reasonable land use assumptions.
2. Recommended values are based on average conditions which may not apply to a particular study area. The percentage impervious may vary greatly even on comparable sized lots due to differences in dwelling size, improvements, etc. Landscape practices should also be considered as it is common in some areas to use ornamental gravels underlain by impervious plastic materials in place of lawns and shrubs. A field investigation of a study area should always be made, and a review of aerial photos, where available may assist in estimating the percentage of impervious cover in developed areas.
3. For typical horse ranch subdivisions increase impervious area 5 percent over the values recommended in the table above.

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**IMPERVIOUS COVER  
FOR  
DEVELOPED AREAS**

