



IRRIGATION SCHEDULES

FOR

WATT - COVINA tract 072718

COVINA, CA

Client

MJS DESIGN GROUP
507 30th Street
Newport Beach, CA 92663
(949) 675-9964

Prepared by

Water Right Design
8 Whatney, suite 100
Irvine, CA 92618
(949) 440-1030

Project No.: MJS-009

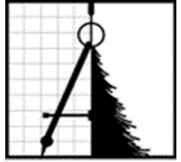
Note These irrigation schedules are based on:

- Estimated soil infiltration rates and moisture holding capacities from site-specific agronomic soils testing.
- Average ETo rates from California Department of Water Resources' CIMIS (California Irrigation Management Information System) data or "Reference Evapotranspiration Values for Selected Locations in California" (*A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California – Appendix A*).
- Estimates of plant material water needs based on species and microclimates, per WUCOLS (*Water Use Classification of Landscape Species*).
- Estimates of plant root depths.
- Estimated irrigation precipitation rates from manufacturers' catalog data.
- Estimates of irrigation system application efficiencies derived from state of California or local Water Efficient Landscape Ordinances.
- Industry-accepted formulas for calculating landscape irrigation system run time, cycles, and frequency.

These irrigation schedules are meant to be used as a guideline only, and do not take the place of proper, ongoing system management. Variances from the estimated site and climatic conditions, plant material water needs, and irrigation parameters will require ongoing adjustments to these calculated baseline schedules.

IRRIGATION SCHEDULES for WATT - COVINA tract 072718

ESTABLISHED LANDSCAPING



project:
 Location: COVINA, CA
 Project No: MJS-009
 Date: 6/21/16
 Controller: HUNTER I-CORE IC-2400

client:
MJS DESIGN GROUP
 507 30th Street
 Newport Beach, CA 92663
 (949) 675-9964

prepared by:
Water Right Design
 8 Whatney, suite 100
 Irvine, CA 92618
 (949) 440-1030

ETo Location: Glendora (Los Angeles co.) Annual ETo Rate: 53.10

| Monthly ETo Rate | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 2.00 | 2.50 | 3.60 | 4.90 | 5.40 | 6.10 | 7.30 | 6.80 | 5.70 | 4.20 | 2.60 | 2.00 |

Controller A

IRRIGATION SYSTEM 'A' FOR HOA-MAINTAINED AREAS.

| Program A | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Days per Week | 1 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 1 |
| Cycles per Day | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Precipitation Rate

| In. / Hr. | Zone | Run Time per Cycle (minutes + seconds) | | | | | | | | | | | |
|-----------|------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.96 | A-8 | 27:53 | 19:17 | 25:05 | 23:32 | 25:05 | 29:17 | 25:26 | 31:36 | 27:22 | 29:16 | 18:43 | 27:53 |
| 0.96 | A-11 | 27:53 | 19:17 | 25:05 | 23:32 | 25:05 | 29:17 | 25:26 | 31:36 | 27:22 | 29:16 | 18:43 | 27:53 |
| 1.10 | A-13 | 26:17 | 18:11 | 23:39 | 22:10 | 23:39 | 27:36 | 23:59 | 29:47 | 25:48 | 27:35 | 17:39 | 26:17 |
| 1.10 | A-14 | 26:17 | 18:11 | 23:39 | 22:10 | 23:39 | 27:36 | 23:59 | 29:47 | 25:48 | 27:35 | 17:39 | 26:17 |

Total Run Time per Station per Irrigation Day (minutes + seconds)

| Program A | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| dripline A-8 | 27:53 | 19:17 | 25:05 | 23:32 | 25:05 | 29:17 | 25:26 | 31:36 | 27:22 | 29:16 | 18:43 | 27:53 |
| dripline A-11 | 27:53 | 19:17 | 25:05 | 23:32 | 25:05 | 29:17 | 25:26 | 31:36 | 27:22 | 29:16 | 18:43 | 27:53 |
| spray A-13 | 26:17 | 18:11 | 23:39 | 22:10 | 23:39 | 27:36 | 23:59 | 29:47 | 25:48 | 27:35 | 17:39 | 26:17 |
| spray A-14 | 26:17 | 18:11 | 23:39 | 22:10 | 23:39 | 27:36 | 23:59 | 29:47 | 25:48 | 27:35 | 17:39 | 26:17 |

| Controller A Program A | (hours + minutes) | | | | | | | | | | | |
|---------------------------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Total Program Run Time per Day | 1:48 | 1:14 | 1:37 | 1:31 | 1:37 | 1:53 | 1:38 | 2:02 | 1:46 | 1:53 | 1:12 | 1:48 |
| Total Program Run Time per Week | 1:48 | 2:29 | 3:14 | 4:34 | 4:52 | 5:41 | 6:35 | 6:08 | 5:18 | 3:47 | 2:25 | 1:48 |

IRRIGATION SCHEDULES for WATT - COVINA tract 072718



Controller A

IRRIGATION SYSTEM 'A' FOR HOA-MAINTAINED AREAS.

| Program B | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Days per Week | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 |
| Cycles per Day | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Precipitation Rate

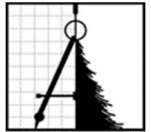
| In. / Hr. | Zone | Run Time per Cycle (minutes + seconds) | | | | | | | | | | | |
|-----------|------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.71 | A-10 | 23:33 | 32:36 | 42:24 | 59:39 | 63:36 | 74:15 | 43:00 | 80:06 | 69:23 | 49:28 | 31:39 | 23:33 |
| 0.71 | A-15 | 23:33 | 32:36 | 42:24 | 59:39 | 63:36 | 74:15 | 43:00 | 80:06 | 69:23 | 49:28 | 31:39 | 23:33 |
| 0.71 | A-16 | 23:33 | 32:36 | 42:24 | 59:39 | 63:36 | 74:15 | 43:00 | 80:06 | 69:23 | 49:28 | 31:39 | 23:33 |

Total Run Time per Station per Irrigation Day (minutes + seconds)

| Program B | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| dripline A-10 | 23:33 | 32:36 | 42:24 | 59:39 | 63:36 | 74:15 | 43:00 | 80:06 | 69:23 | 49:28 | 31:39 | 23:33 |
| dripline A-15 | 23:33 | 32:36 | 42:24 | 59:39 | 63:36 | 74:15 | 43:00 | 80:06 | 69:23 | 49:28 | 31:39 | 23:33 |
| dripline A-16 | 23:33 | 32:36 | 42:24 | 59:39 | 63:36 | 74:15 | 43:00 | 80:06 | 69:23 | 49:28 | 31:39 | 23:33 |

| Controller A Program B | (hours + minutes) | | | | | | | | | | | |
|---------------------------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Total Program Run Time per Day | 1:10 | 1:37 | 2:07 | 2:58 | 3:10 | 3:42 | 2:08 | 4:00 | 3:28 | 2:28 | 1:34 | 1:10 |
| Total Program Run Time per Week | 1:10 | 1:37 | 2:07 | 2:58 | 3:10 | 3:42 | 4:17 | 4:00 | 3:28 | 2:28 | 1:34 | 1:10 |

IRRIGATION SCHEDULES for WATT - COVINA tract 072718



Controller A

IRRIGATION SYSTEM 'A' FOR HOA-MAINTAINED AREAS.

| Program C | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Days per Week | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Cycles per Day | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Precipitation Rate

| In. / Hr. | Zone | Run Time per Cycle (minutes + seconds) | | | | | | | | | | | |
|-----------|------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.71 | A-1 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| 0.71 | A-2 | 08:01 | 11:05 | 14:25 | 20:17 | 21:38 | 25:15 | 29:14 | 27:14 | 23:35 | 16:49 | 10:46 | 08:01 |
| 0.71 | A-3 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| 4.82 | A-4 | 03:28 | 04:48 | 06:15 | 08:48 | 09:23 | 10:57 | 12:41 | 11:49 | 10:14 | 07:18 | 04:40 | 03:28 |
| 0.71 | A-5 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| 0.71 | A-6 | 06:36 | 09:08 | 11:52 | 16:42 | 17:49 | 20:47 | 24:05 | 22:26 | 19:26 | 13:51 | 08:52 | 06:36 |
| 0.71 | A-7 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| 4.82 | A-9 | 03:28 | 04:48 | 06:15 | 08:48 | 09:23 | 10:57 | 12:41 | 11:49 | 10:14 | 07:18 | 04:40 | 03:28 |
| 4.82 | A-12 | 01:23 | 01:55 | 02:30 | 03:31 | 03:45 | 04:23 | 05:04 | 04:43 | 04:06 | 02:55 | 01:52 | 01:23 |
| 0.71 | A-17 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| 0.71 | A-18 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| 0.71 | A-19 | 08:01 | 11:05 | 14:25 | 20:17 | 21:38 | 25:15 | 29:14 | 27:14 | 23:35 | 16:49 | 10:46 | 08:01 |
| 0.71 | A-20 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |

Total Run Time per Station per Irrigation Day (minutes + seconds)

| Program C | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| dripline A-1 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| dripline A-2 | 08:01 | 11:05 | 14:25 | 20:17 | 21:38 | 25:15 | 29:14 | 27:14 | 23:35 | 16:49 | 10:46 | 08:01 |
| dripline A-3 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| bubbler A-4 | 03:28 | 04:48 | 06:15 | 08:48 | 09:23 | 10:57 | 12:41 | 11:49 | 10:14 | 07:18 | 04:40 | 03:28 |
| dripline A-5 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| dripline A-6 | 06:36 | 09:08 | 11:52 | 16:42 | 17:49 | 20:47 | 24:05 | 22:26 | 19:26 | 13:51 | 08:52 | 06:36 |
| dripline A-7 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| bubbler A-9 | 03:28 | 04:48 | 06:15 | 08:48 | 09:23 | 10:57 | 12:41 | 11:49 | 10:14 | 07:18 | 04:40 | 03:28 |
| bubbler A-12 | 01:23 | 01:55 | 02:30 | 03:31 | 03:45 | 04:23 | 05:04 | 04:43 | 04:06 | 02:55 | 01:52 | 01:23 |
| dripline A-17 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| dripline A-18 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |
| dripline A-19 | 08:01 | 11:05 | 14:25 | 20:17 | 21:38 | 25:15 | 29:14 | 27:14 | 23:35 | 16:49 | 10:46 | 08:01 |
| dripline A-20 | 09:25 | 13:02 | 16:58 | 23:51 | 25:27 | 29:42 | 34:24 | 32:02 | 27:45 | 19:47 | 12:40 | 09:25 |

| Controller A Program C | (hours + minutes) | | | | | | | | | | | |
|---------------------------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Total Program Run Time per Day | 1:36 | 2:14 | 2:54 | 4:05 | 4:21 | 5:05 | 5:53 | 5:29 | 4:45 | 3:23 | 2:10 | 1:36 |
| Total Program Run Time per Week | 1:36 | 2:14 | 2:54 | 4:05 | 4:21 | 5:05 | 5:53 | 5:29 | 4:45 | 3:23 | 2:10 | 1:36 |

| Controller A ALL Programs | (hours + minutes) | | | | | | | | | | | |
|----------------------------------|-------------------|------|------|-------|-------|-------|-------|-------|-------|------|------|------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| Max. Run Time per Irrigation Day | 1:48 | 2:14 | 2:54 | 4:05 | 4:21 | 5:05 | 5:53 | 5:29 | 4:45 | 3:23 | 2:10 | 1:48 |
| Total Program Run Time per Week | 4:35 | 6:21 | 8:16 | 11:38 | 12:24 | 14:29 | 16:47 | 15:38 | 13:32 | 9:39 | 6:10 | 4:35 |