THE RANCH PLAN PLANNED COMMUNITY

PLANNING AREAS 3 AND 4 RUNOFF MANAGEMENT PLAN

Michael Baker INTERNATIONAL

TECHNICAL APPENDIX D.2

UH Expected Value – Single Area

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 119                                *
* 2-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV02119S.DAT
  TIME/DATE OF STUDY: 11:53 09/05/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   49511.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.382 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.595; LOW LOSS FRACTION = 0.931
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.16; 30-MINUTE =  0.30;  1-HOUR =  0.41
    3-HOUR =  0.77;    6-HOUR =  1.15; 24-HOUR =  2.03
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.345; 30-MINUTE = 0.395;  1-HOUR = 0.435
    3-HOUR = 0.785;    6-HOUR = 0.904; 24-HOUR = 0.944
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02119S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     119.00| Subarea (UH) Added to Stream #1|       0.0       534.2|
20.417 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                  *
* EXISTING CONDITION - REGIONAL NODE 126                                 *
* 2-YR EV JMITAL SEPT 2017                                               *
 **************************************************************************

  FILE NAME: EV02126S.DAT
  TIME/DATE OF STUDY: 11:31 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50518.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.573 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.595; LOW LOSS FRACTION = 0.933
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.16; 30-MINUTE =  0.30;  1-HOUR =  0.41
    3-HOUR =  0.77;    6-HOUR =  1.14; 24-HOUR =  2.01
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0       513.8|
20.583 |             |           |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 127                                *
* 2-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV02127S.DAT
  TIME/DATE OF STUDY: 11:35 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   53146.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    5.823 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.595; LOW LOSS FRACTION = 0.935
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.30;  1-HOUR =  0.41
    3-HOUR =  0.76;    6-HOUR =  1.13; 24-HOUR =  1.99
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.332; 30-MINUTE = 0.384;  1-HOUR = 0.424
    3-HOUR = 0.774;    6-HOUR = 0.899; 24-HOUR = 0.941
=============================================================================
```



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 +-----------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0       493.8|
20.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:

                             RBF CONSULTING
                           14725 ALTON PARKWAY
                             IRVINE, CA 92618


 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 132C)                 *
* 2-YR  EXPECTED VALUE    MCHANDOO                                      *
 ************************************************************************

  FILE NAME: EV0232CS.DAT
  TIME/DATE OF STUDY: 14:32 11/16/2013


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    132.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4924.400 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.263 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.487; LOW LOSS FRACTION = 0.830
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.13; 30-MINUTE =  0.28;  1-HOUR =  0.37
    3-HOUR =  0.62;    6-HOUR =  0.85; 24-HOUR =  1.44
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.788; 30-MINUTE = 0.788;  1-HOUR = 0.788
    3-HOUR = 0.968;    6-HOUR = 0.984; 24-HOUR = 0.990
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0232CS.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     132.00| Subarea (UH) Added to Stream #1|       0.0       385.8|
17.333 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133T)                  *
* 2-YR  EV SEPT 2017 JMITAL                                              *
 **************************************************************************

  FILE NAME: EV0233TS.DAT
  TIME/DATE OF STUDY: 11:39 07/26/2018


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    7114.600 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.881 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.522; LOW LOSS FRACTION = 0.867
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.13; 30-MINUTE =  0.28;  1-HOUR =  0.37
    3-HOUR =  0.62;    6-HOUR =  0.85; 24-HOUR =  1.44
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.731; 30-MINUTE = 0.731;  1-HOUR = 0.731
    3-HOUR = 0.956;    6-HOUR = 0.977; 24-HOUR = 0.986
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0233TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0       354.4|
17.917 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133U)                 *
* 2-YR  EV SEPT 2017 JMITAL                                             *
 *************************************************************************

  FILE NAME: EV0233US.DAT
  TIME/DATE OF STUDY: 11:36 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   54112.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.071 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.595; LOW LOSS FRACTION = 0.936
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.30;  1-HOUR =  0.41
    3-HOUR =  0.76;    6-HOUR =  1.12; 24-HOUR =  1.98
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.329; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.898; 24-HOUR = 0.940
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0233US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0       483.2|
21.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133C)                 *
* 2-YR  EV SEPT 2017 JMITAL                                             *
 ************************************************************************

  FILE NAME: EV0233CS.DAT
  TIME/DATE OF STUDY: 11:39 07/26/2018


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   61127.500 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.071 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.586; LOW LOSS FRACTION = 0.929
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.41
    3-HOUR =  0.75;    6-HOUR =  1.09; 24-HOUR =  1.91
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.362;  1-HOUR = 0.408
    3-HOUR = 0.753;    6-HOUR = 0.891; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0233CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0       583.3|
21.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134T)                  *
* 2-YR  EV    JMITAL                                                     *
 **************************************************************************

  FILE NAME: EV0234TS.DAT
  TIME/DATE OF STUDY: 15:36 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4082.800 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.072 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.589; LOW LOSS FRACTION = 0.935
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.13; 30-MINUTE =  0.28;  1-HOUR =  0.37
    3-HOUR =  0.62;    6-HOUR =  0.85; 24-HOUR =  1.44
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.818; 30-MINUTE = 0.818;  1-HOUR = 0.818
    3-HOUR = 0.973;    6-HOUR = 0.986; 24-HOUR = 0.992
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0234TS.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13500.00     134.00| Subarea (UH) Added to Stream #1|       0.0       120.5|
19.083 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134U)                 *
* 2-YR  EV SEPT 2017 JMITAL                                             *
 ************************************************************************

  FILE NAME: EV0234US.DAT
  TIME/DATE OF STUDY: 12:03 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   62471.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.283 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.587; LOW LOSS FRACTION = 0.929
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.41
    3-HOUR =  0.74;    6-HOUR =  1.09; 24-HOUR =  1.90
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.359;  1-HOUR = 0.405
    3-HOUR = 0.751;    6-HOUR = 0.890; 24-HOUR = 0.936
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0234US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0       582.4|
21.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134C)                 *
* 2-YR  EV SEPT 2017 JMITAL                                             *
 ************************************************************************

  FILE NAME: EV0234CS.DAT
  TIME/DATE OF STUDY: 12:03 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   66553.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.283 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.587; LOW LOSS FRACTION = 0.929
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.74;    6-HOUR =  1.07; 24-HOUR =  1.88
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
==========================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0234CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0       609.6|
21.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 137)                   *
* 2-YR  EV SEPT 2017 JMITAL                                              *
 **************************************************************************

  FILE NAME: EV02137S.DAT
  TIME/DATE OF STUDY: 12:03 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67792.703 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.478 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.586; LOW LOSS FRACTION = 0.928
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.73;    6-HOUR =  1.07; 24-HOUR =  1.87
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     137.00| Subarea (UH) Added to Stream #1|       0.0       616.5|
21.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
```

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************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 138)                  *
* 2-YR  EV SEPT 2017 JMITAL                                             *
 ************************************************************************

  FILE NAME: EV02138S.DAT
  TIME/DATE OF STUDY: 12:04 09/12/2017


                        ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    138.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   69125.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.681 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.585; LOW LOSS FRACTION = 0.927
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.73;    6-HOUR =  1.06; 24-HOUR =  1.86
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
========================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     138.00| Subarea (UH) Added to Stream #1|       0.0       624.5|
21.500 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 139)                  *
* 2-YR  EV SEPT 2017 JMITAL                                             *
 *************************************************************************

  FILE NAME: EV02139S.DAT
  TIME/DATE OF STUDY: 12:04 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    139.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   69553.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    6.782 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.584; LOW LOSS FRACTION = 0.925
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.15; 30-MINUTE =  0.29;  1-HOUR =  0.40
    3-HOUR =  0.73;    6-HOUR =  1.06; 24-HOUR =  1.86
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV02139S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     139.00| Subarea (UH) Added to Stream #1|       0.0       640.0|
22.083 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 119                                *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV05119S.DAT
  TIME/DATE OF STUDY: 12:10 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   49511.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.317 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.496; LOW LOSS FRACTION = 0.845
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.23; 30-MINUTE =  0.44;  1-HOUR =  0.62
    3-HOUR =  1.15;    6-HOUR =  1.71; 24-HOUR =  3.02
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.345; 30-MINUTE = 0.395;  1-HOUR = 0.435
    3-HOUR = 0.785;    6-HOUR = 0.904; 24-HOUR = 0.944
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05119S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     119.00| Subarea (UH) Added to Stream #1|       0.0      2403.4|
19.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 126                                *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV05126S.DAT
  TIME/DATE OF STUDY: 12:23 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   50518.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.438 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.496; LOW LOSS FRACTION = 0.847
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.23; 30-MINUTE =  0.44;  1-HOUR =  0.62
    3-HOUR =  1.15;    6-HOUR =  1.71; 24-HOUR =  3.00
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0      2379.7|
19.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 127                                *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV05127S.DAT
  TIME/DATE OF STUDY: 12:16 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   53146.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.597 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.496; LOW LOSS FRACTION = 0.852
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.23; 30-MINUTE =  0.44;  1-HOUR =  0.61
    3-HOUR =  1.14;    6-HOUR =  1.68; 24-HOUR =  2.96
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.332; 30-MINUTE = 0.384;  1-HOUR = 0.424
    3-HOUR = 0.774;    6-HOUR = 0.899; 24-HOUR = 0.941
=============================================================================
```



```
 +-----------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0      2303.3|
19.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 132C)                 *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV0532CS.DAT
  TIME/DATE OF STUDY: 17:23 11/14/2013


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    132.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =    4924.400 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    0.987 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.406; LOW LOSS FRACTION = 0.789
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.18; 30-MINUTE =  0.41;  1-HOUR =  0.55
    3-HOUR =  0.92;    6-HOUR =  1.27; 24-HOUR =  2.12
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.788; 30-MINUTE = 0.788;  1-HOUR = 0.788
    3-HOUR = 0.968;    6-HOUR = 0.984; 24-HOUR = 0.990
=============================================================================
```



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 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0532CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     132.00| Subarea (UH) Added to Stream #1|       0.0       839.3|
17.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133T)                  *
* 5-YR EV JMITAL SEPT 2017                                               *
 **************************************************************************

  FILE NAME: EV0533TS.DAT
  TIME/DATE OF STUDY: 17:22 11/14/2013


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    7114.600 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.498 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.435; LOW LOSS FRACTION = 0.818
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.18; 30-MINUTE =  0.41;  1-HOUR =  0.55
    3-HOUR =  0.92;    6-HOUR =  1.27; 24-HOUR =  2.12
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.731; 30-MINUTE = 0.731;  1-HOUR = 0.731
    3-HOUR = 0.956;    6-HOUR = 0.977; 24-HOUR = 0.986
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0533TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0       781.1|
17.500 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133U)                 *
* 5-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV0533US.DAT
  TIME/DATE OF STUDY: 12:17 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   54112.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.755 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.496; LOW LOSS FRACTION = 0.853
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.23; 30-MINUTE =  0.44;  1-HOUR =  0.61
    3-HOUR =  1.13;    6-HOUR =  1.68; 24-HOUR =  2.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.329; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.898; 24-HOUR = 0.940
==========================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0533US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      2307.5|
19.417 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

```
************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133C)                 *
* 5-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV0533CS.DAT
  TIME/DATE OF STUDY: 12:18 09/12/2017


                        ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   61227.500 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.755 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.489; LOW LOSS FRACTION = 0.850
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.11;    6-HOUR =  1.63; 24-HOUR =  2.85
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.362;  1-HOUR = 0.408
    3-HOUR = 0.753;    6-HOUR = 0.891; 24-HOUR = 0.936
========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0533CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      2458.4|
19.417 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134T)                 *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV0534TS.DAT
  TIME/DATE OF STUDY: 15:36 09/05/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =    4082.800 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.268 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.491; LOW LOSS FRACTION = 0.869
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.18; 30-MINUTE =  0.41;  1-HOUR =  0.55
    3-HOUR =  0.92;    6-HOUR =  1.27; 24-HOUR =  2.12
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.818; 30-MINUTE = 0.818;  1-HOUR = 0.818
    3-HOUR = 0.973;    6-HOUR = 0.986; 24-HOUR = 0.992
=============================================================================
```



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 +-----------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0534TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13500.00     134.00| Subarea (UH) Added to Stream #1|       0.0       329.0|
18.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134U)                  *
* 5-YR EV JMITAL SEPT 2017                                               *
 ************************************************************************

  FILE NAME: EV0534US.DAT
  TIME/DATE OF STUDY: 12:28 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   62471.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.889 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.489; LOW LOSS FRACTION = 0.851
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.10;    6-HOUR =  1.62; 24-HOUR =  2.84
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.359;  1-HOUR = 0.405
    3-HOUR = 0.751;    6-HOUR = 0.890; 24-HOUR = 0.936
=============================================================================
```



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 +-----------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0534US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0      2414.5|
19.583 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134C)                 *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV0534CS.DAT
  TIME/DATE OF STUDY: 12:18 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   66553.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.889 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.489; LOW LOSS FRACTION = 0.852
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.60; 24-HOUR =  2.79
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0534CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0      2470.2|
19.583 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 137)                  *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV05137S.DAT
  TIME/DATE OF STUDY: 12:19 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    137.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   67792.703 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    4.013 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.489; LOW LOSS FRACTION = 0.851
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.44;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.59; 24-HOUR =  2.78
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
=============================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     137.00| Subarea (UH) Added to Stream #1|       0.0      2500.8|
19.667 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 138)                  *
* 5-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV05138S.DAT
  TIME/DATE OF STUDY: 12:19 09/12/2017


                        ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    138.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   69125.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    4.142 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.488; LOW LOSS FRACTION = 0.849
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.43;  1-HOUR =  0.60
    3-HOUR =  1.09;    6-HOUR =  1.59; 24-HOUR =  2.77
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     138.00| Subarea (UH) Added to Stream #1|       0.0      2510.0|
19.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 139)                  *
* 5-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV05139S.DAT
  TIME/DATE OF STUDY: 12:20 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    139.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   69553.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    4.206 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.487; LOW LOSS FRACTION = 0.848
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.22; 30-MINUTE =  0.43;  1-HOUR =  0.60
    3-HOUR =  1.08;    6-HOUR =  1.59; 24-HOUR =  2.76
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
=============================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV05139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     139.00| Subarea (UH) Added to Stream #1|       0.0      2531.3|
19.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 119                                *
* 10-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV10119S.DAT
  TIME/DATE OF STUDY: 12:48 09/12/2017


                       ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   49511.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.320 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.746
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.33; 30-MINUTE =  0.63;  1-HOUR =  0.88
    3-HOUR =  1.65;    6-HOUR =  2.45; 24-HOUR =  4.32
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.345; 30-MINUTE = 0.395;  1-HOUR = 0.435
    3-HOUR = 0.785;    6-HOUR = 0.904; 24-HOUR = 0.944
========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10119S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     119.00| Subarea (UH) Added to Stream #1|       0.0      7238.7|
18.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                  *
* EXISTING CONDITION - REGIONAL NODE 126                                 *
* 10-YR EV JMITAL SEPT 2017                                              *
 **************************************************************************

  FILE NAME: EV10126S.DAT
  TIME/DATE OF STUDY: 12:37 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50518.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.426 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.749
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.33; 30-MINUTE =  0.63;  1-HOUR =  0.88
    3-HOUR =  1.64;    6-HOUR =  2.44; 24-HOUR =  4.29
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0      7113.8|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 127                                *
* 10-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV10127S.DAT
  TIME/DATE OF STUDY: 12:38 09/05/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   53146.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.569 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.754
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.32; 30-MINUTE =  0.63;  1-HOUR =  0.87
    3-HOUR =  1.62;    6-HOUR =  2.41; 24-HOUR =  4.23
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.332; 30-MINUTE = 0.384;  1-HOUR = 0.424
    3-HOUR = 0.774;    6-HOUR = 0.899; 24-HOUR = 0.941
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0      6971.8|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 132C)                  *
* 10-YR  EXPECTED VALUE    MCHANDOO                                      *
 ************************************************************************

  FILE NAME: EV1032CS.DAT
  TIME/DATE OF STUDY: 17:04 11/14/2013


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    132.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =    4924.400 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    0.938 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.244; LOW LOSS FRACTION = 0.727
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.26; 30-MINUTE =  0.59;  1-HOUR =  0.78
    3-HOUR =  1.31;    6-HOUR =  1.81; 24-HOUR =  3.03
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.788; 30-MINUTE = 0.788;  1-HOUR = 0.788
    3-HOUR = 0.968;    6-HOUR = 0.984; 24-HOUR = 0.990
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1032CS.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     132.00| Subarea (UH) Added to Stream #1|       0.0      1847.0|
17.000 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133T)                 *
* 10-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV1033TS.DAT
  TIME/DATE OF STUDY: 11:33 07/26/2018


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    7114.600 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.331 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.261; LOW LOSS FRACTION = 0.748
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.26; 30-MINUTE =  0.59;  1-HOUR =  0.78
    3-HOUR =  1.31;    6-HOUR =  1.81; 24-HOUR =  3.03
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.731; 30-MINUTE = 0.731;  1-HOUR = 0.731
    3-HOUR = 0.956;    6-HOUR = 0.977; 24-HOUR = 0.986
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1033TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      1874.6|
17.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133U)                  *
* 10-YR  EXPECTED VALUE    MCHANDOO                                      *
 ************************************************************************

  FILE NAME: EV1033US.DAT
  TIME/DATE OF STUDY: 17:02 11/14/2013


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   54112.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.732 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.756
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.32; 30-MINUTE =  0.63;  1-HOUR =  0.87
    3-HOUR =  1.62;    6-HOUR =  2.39; 24-HOUR =  4.21
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.329; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.898; 24-HOUR = 0.940
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1033US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      6908.1|
18.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133C)                  *
* 10-YR  EXPECTED VALUE    MCHANDOO                                      *
 ************************************************************************

  FILE NAME: EV1033CS.DAT
  TIME/DATE OF STUDY: 17:03 11/14/2013


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   61227.500 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.732 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.756
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.86
    3-HOUR =  1.58;    6-HOUR =  2.33; 24-HOUR =  4.07
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.362;  1-HOUR = 0.408
    3-HOUR = 0.753;    6-HOUR = 0.891; 24-HOUR = 0.936
==============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1033CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      7149.6|
18.750 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134T)                  *
* 10-YR  EV    JMITAL                                                    *
 ************************************************************************

  FILE NAME: EV1034TS.DAT
  TIME/DATE OF STUDY: 15:31 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4082.800 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.481 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.294; LOW LOSS FRACTION = 0.784
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.26; 30-MINUTE =  0.59;  1-HOUR =  0.78
    3-HOUR =  1.31;    6-HOUR =  1.81; 24-HOUR =  3.03
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.818; 30-MINUTE = 0.818;  1-HOUR = 0.818
    3-HOUR = 0.973;    6-HOUR = 0.986; 24-HOUR = 0.992
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1034TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13500.00     134.00| Subarea (UH) Added to Stream #1|       0.0      1038.7|
17.500 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134U)                 *
* 10-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV1034US.DAT
  TIME/DATE OF STUDY: 12:57 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   62471.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.852 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.757
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.86
    3-HOUR =  1.58;    6-HOUR =  2.32; 24-HOUR =  4.05
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.359;  1-HOUR = 0.405
    3-HOUR = 0.751;    6-HOUR = 0.890; 24-HOUR = 0.936
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1034US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0      7015.2|
18.417 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134C)                 *
* 10-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV1034CS.DAT
  TIME/DATE OF STUDY: 12:57 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   66553.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.852 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.758
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.86
    3-HOUR =  1.56;    6-HOUR =  2.29; 24-HOUR =  3.99
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV1034CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0      7065.6|
18.667 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 137)                  *
* 10-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV10137S.DAT
  TIME/DATE OF STUDY: 12:58 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67792.703 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.989 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.758
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.85
    3-HOUR =  1.56;    6-HOUR =  2.28; 24-HOUR =  3.97
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10137S.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     137.00| Subarea (UH) Added to Stream #1|       0.0      7075.6|
18.750 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 138)                  *
* 10-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV10138S.DAT
  TIME/DATE OF STUDY: 12:58 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    138.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69125.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.085 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.757
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.85
    3-HOUR =  1.55;    6-HOUR =  2.27; 24-HOUR =  3.95
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     138.00| Subarea (UH) Added to Stream #1|       0.0      7056.3|
18.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 139)                  *
* 10-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV10139S.DAT
  TIME/DATE OF STUDY: 12:58 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    139.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69553.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    3.143 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.755
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.31; 30-MINUTE =  0.62;  1-HOUR =  0.85
    3-HOUR =  1.55;    6-HOUR =  2.26; 24-HOUR =  3.95
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV10139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     139.00| Subarea (UH) Added to Stream #1|       0.0      7041.1|
19.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 119                                *
* 25-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV25119S.DAT
  TIME/DATE OF STUDY: 13:22 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   49511.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.119 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.433
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.42; 30-MINUTE =  0.78;  1-HOUR =  1.08
    3-HOUR =  2.02;    6-HOUR =  3.00; 24-HOUR =  5.30
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.345; 30-MINUTE = 0.395;  1-HOUR = 0.435
    3-HOUR = 0.785;    6-HOUR = 0.904; 24-HOUR = 0.944
=============================================================================
```



```
 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25119S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     119.00| Subarea (UH) Added to Stream #1|       0.0     14939.3|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                  *
* EXISTING CONDITION - REGIONAL NODE 126                                 *
* 25-YR EV JMITAL SEPT 2017                                              *
 **************************************************************************

  FILE NAME: EV25126S.DAT
  TIME/DATE OF STUDY: 13:22 09/12/2017


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50518.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.212 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.436
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.42; 30-MINUTE =  0.78;  1-HOUR =  1.08
    3-HOUR =  2.01;    6-HOUR =  2.99; 24-HOUR =  5.27
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0     14923.9|
18.250 |             |           |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 127                                *
* 25-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV25127S.DAT
  TIME/DATE OF STUDY: 12:34 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   53146.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.337 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.442
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.41; 30-MINUTE =  0.77;  1-HOUR =  1.07
    3-HOUR =  1.99;    6-HOUR =  2.95; 24-HOUR =  5.19
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.332; 30-MINUTE = 0.384;  1-HOUR = 0.424
    3-HOUR = 0.774;    6-HOUR = 0.899; 24-HOUR = 0.941
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0     14963.7|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 132C)                  *
* 25-YR EV JMITAL SEPT 2017                                              *
 **************************************************************************

  FILE NAME: EV2532CS.DAT
  TIME/DATE OF STUDY: 11:31 07/26/2018


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    132.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4924.400 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    0.856 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.244; LOW LOSS FRACTION = 0.567
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.34; 30-MINUTE =  0.72;  1-HOUR =  0.95
    3-HOUR =  1.59;    6-HOUR =  2.20; 24-HOUR =  3.68
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.788; 30-MINUTE = 0.788;  1-HOUR = 0.788
    3-HOUR = 0.968;    6-HOUR = 0.984; 24-HOUR = 0.990
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2532CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13010.00     132.00| Subarea (UH) Added to Stream #1|       0.0      2693.2|
16.917 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133T)                 *
* 25-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV2533TS.DAT
  TIME/DATE OF STUDY: 11:31 07/26/2018


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    7114.600 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.209 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.261; LOW LOSS FRACTION = 0.538
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.34; 30-MINUTE =  0.72;  1-HOUR =  0.95
    3-HOUR =  1.59;    6-HOUR =  2.20; 24-HOUR =  3.68
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.731; 30-MINUTE = 0.731;  1-HOUR = 0.731
    3-HOUR = 0.956;    6-HOUR = 0.977; 24-HOUR = 0.986
==========================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2533TS.DAT   ]
Page:   1 of    |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                 | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      2942.3|
17.250 |             |           |
 +-------------------+---------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133U)                 *
* 25-YR  EXPECTED VALUE    MCHANDOO                                     *
 ************************************************************************

  FILE NAME: EV2533US.DAT
  TIME/DATE OF STUDY: 15:59 11/14/2013


                        ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   54112.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.481 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.445
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.41; 30-MINUTE =  0.77;  1-HOUR =  1.07
    3-HOUR =  1.98;    6-HOUR =  2.93; 24-HOUR =  5.16
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.329; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.898; 24-HOUR = 0.940
========================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2533US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0     14948.3|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
_____
*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133C)                 *
* 25-YR  EXPECTED VALUE    MCHANDOO                                     *
 ************************************************************************

  FILE NAME: EV2533CS.DAT
  TIME/DATE OF STUDY: 16:00 11/14/2013


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   61227.500 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.481 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.455
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.77;  1-HOUR =  1.05
    3-HOUR =  1.94;    6-HOUR =  2.85; 24-HOUR =  4.99
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.362;  1-HOUR = 0.408
    3-HOUR = 0.753;    6-HOUR = 0.891; 24-HOUR = 0.936
=============================================================================
```



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 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2533CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0     15881.5|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
```

```
**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134T)                 *
* 25-YR  EXPECTED VALUE    MCHANDOO                                     *
 ************************************************************************

  FILE NAME: EV2534TS.DAT
  TIME/DATE OF STUDY: 15:56 11/14/2013


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4082.800 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.343 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.294; LOW LOSS FRACTION = 0.475
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.34; 30-MINUTE =  0.72;  1-HOUR =  0.95
    3-HOUR =  1.59;    6-HOUR =  2.20; 24-HOUR =  3.68
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.818; 30-MINUTE = 0.818;  1-HOUR = 0.818
    3-HOUR = 0.973;    6-HOUR = 0.986; 24-HOUR = 0.992
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2534TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0      1791.9|
17.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134U)                 *
* 25-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV2534US.DAT
  TIME/DATE OF STUDY: 13:23 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   62471.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.586 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.456
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.77;  1-HOUR =  1.05
    3-HOUR =  1.93;    6-HOUR =  2.84; 24-HOUR =  4.96
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.359;  1-HOUR = 0.405
    3-HOUR = 0.751;    6-HOUR = 0.890; 24-HOUR = 0.936
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2534US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0     15931.8|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134C)                 *
* 25-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV2534CS.DAT
  TIME/DATE OF STUDY: 13:23 09/12/2017


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   66553.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.586 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.457
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.76;  1-HOUR =  1.05
    3-HOUR =  1.91;    6-HOUR =  2.80; 24-HOUR =  4.88
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV2534CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0     16536.2|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                        Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 137)                  *
* 25-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV25137S.DAT
  TIME/DATE OF STUDY: 13:24 09/12/2017


                       ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67792.703 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.707 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.457
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.76;  1-HOUR =  1.04
    3-HOUR =  1.90;    6-HOUR =  2.79; 24-HOUR =  4.86
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     137.00| Subarea (UH) Added to Stream #1|       0.0     16525.6|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 138)                  *
* 25-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV25138S.DAT
  TIME/DATE OF STUDY: 13:29 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    138.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   69125.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.793 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.457
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.76;  1-HOUR =  1.04
    3-HOUR =  1.90;    6-HOUR =  2.77; 24-HOUR =  4.84
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     138.00| Subarea (UH) Added to Stream #1|       0.0     16653.7|
18.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 139)                   *
* 25-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV25139S.DAT
  TIME/DATE OF STUDY: 13:25 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    139.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   69553.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.844 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.458
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.39; 30-MINUTE =  0.76;  1-HOUR =  1.04
    3-HOUR =  1.89;    6-HOUR =  2.77; 24-HOUR =  4.83
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV25139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     139.00| Subarea (UH) Added to Stream #1|       0.0     16620.6|
17.917 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
-------------------------------------+

   END OF FLOODSCx ROUTING ANALYSIS
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*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 119                                *
* 50-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV50119S.DAT
  TIME/DATE OF STUDY: 13:40 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   49511.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.043 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.399
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.46; 30-MINUTE =  0.87;  1-HOUR =  1.21
    3-HOUR =  2.28;    6-HOUR =  3.40; 24-HOUR =  5.99
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.345; 30-MINUTE = 0.395;  1-HOUR = 0.435
    3-HOUR = 0.785;    6-HOUR = 0.904; 24-HOUR = 0.944
=============================================================================
```



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 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50119S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     119.00| Subarea (UH) Added to Stream #1|       0.0     17843.7|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 126                                *
* 50-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV50126S.DAT
  TIME/DATE OF STUDY: 13:40 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50518.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.130 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.402
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.46; 30-MINUTE =  0.87;  1-HOUR =  1.21
    3-HOUR =  2.27;    6-HOUR =  3.38; 24-HOUR =  5.95
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0     17828.1|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                  *
* EXISTING CONDITION - REGIONAL NODE 127                                 *
* 50-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV50127S.DAT
  TIME/DATE OF STUDY: 13:40 09/12/2017


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   53146.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.249 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.408
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.46; 30-MINUTE =  0.87;  1-HOUR =  1.20
    3-HOUR =  2.25;    6-HOUR =  3.33; 24-HOUR =  5.86
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.332; 30-MINUTE = 0.384;  1-HOUR = 0.424
    3-HOUR = 0.774;    6-HOUR = 0.899; 24-HOUR = 0.941
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0     17924.5|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
```

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*****************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 132C)                 *
* 50-YR EV JMITAL                                                       *
 *************************************************************************

  FILE NAME: EV5032CS.DAT
  TIME/DATE OF STUDY: 16:07 09/05/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    132.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =    4924.400 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    0.821 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.244; LOW LOSS FRACTION = 0.538
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.37; 30-MINUTE =  0.80;  1-HOUR =  1.06
    3-HOUR =  1.78;    6-HOUR =  2.47; 24-HOUR =  4.12
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.788; 30-MINUTE = 0.788;  1-HOUR = 0.788
    3-HOUR = 0.968;    6-HOUR = 0.984; 24-HOUR = 0.990
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5032CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13010.00     132.00| Subarea (UH) Added to Stream #1|       0.0      3155.1|
16.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************** DESCRIPTION OF STUDY **************************
* RANCHO MISSION VIEJO                                                    *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133T)                   *
* 50-YR EV JMITAL SEPT 2017                                               *
 *************************************************************************

  FILE NAME: EV5033TS.DAT
  TIME/DATE OF STUDY: 11:29 07/26/2018


                         ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  13010.00 TO NODE    133.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =    7114.600 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.156 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.261; LOW LOSS FRACTION = 0.508
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.37; 30-MINUTE =  0.80;  1-HOUR =  1.06
    3-HOUR =  1.78;    6-HOUR =  2.47; 24-HOUR =  4.12
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.731; 30-MINUTE = 0.731;  1-HOUR = 0.731
    3-HOUR = 0.956;    6-HOUR = 0.977; 24-HOUR = 0.986
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5033TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13010.00     133.00| Subarea (UH) Added to Stream #1|       0.0      3500.1|
17.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133U)                 *
* 50-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV5033US.DAT
  TIME/DATE OF STUDY: 13:44 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   54112.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.385 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.411
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.45; 30-MINUTE =  0.87;  1-HOUR =  1.20
    3-HOUR =  2.24;    6-HOUR =  3.32; 24-HOUR =  5.83
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.329; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.898; 24-HOUR = 0.940
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5033US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0     17911.4|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133C)                  *
* 50-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV5033CS.DAT
  TIME/DATE OF STUDY: 13:45 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   61227.500 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.385 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.421
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.86;  1-HOUR =  1.18
    3-HOUR =  2.18;    6-HOUR =  3.22; 24-HOUR =  5.63
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.362;  1-HOUR = 0.408
    3-HOUR = 0.753;    6-HOUR = 0.891; 24-HOUR = 0.936
=============================================================================
```



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 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5033CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0     19017.5|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-----------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134T)                  *
* 50-YR  EV    JMITAL                                                    *
 ************************************************************************

  FILE NAME: EV5034TS.DAT
  TIME/DATE OF STUDY: 15:42 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4082.800 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.287 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.294; LOW LOSS FRACTION = 0.443
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.37; 30-MINUTE =  0.80;  1-HOUR =  1.06
    3-HOUR =  1.78;    6-HOUR =  2.47; 24-HOUR =  4.12
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.818; 30-MINUTE = 0.818;  1-HOUR = 0.818
    3-HOUR = 0.973;    6-HOUR = 0.986; 24-HOUR = 0.992
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5034TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 | 13500.00     134.00| Subarea (UH) Added to Stream #1|       0.0      2124.1|
17.333 |             |           |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134U)                 *
* 50-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV5034US.DAT
  TIME/DATE OF STUDY: 13:45 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   62471.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.484 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.422
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.86;  1-HOUR =  1.18
    3-HOUR =  2.18;    6-HOUR =  3.20; 24-HOUR =  5.60
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.359;  1-HOUR = 0.405
    3-HOUR = 0.751;    6-HOUR = 0.890; 24-HOUR = 0.936
=============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5034US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0     19119.0|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134C)                 *
* 50-YR EV JMITAL SEPT 2017                                             *
 ************************************************************************

  FILE NAME: EV5034CS.DAT
  TIME/DATE OF STUDY: 13:46 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   66553.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.484 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.423
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.15;    6-HOUR =  3.16; 24-HOUR =  5.51
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV5034CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0     19840.8|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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*****************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 137)                  *
* 50-YR EV JMITAL SEPT 2017                                             *
 *************************************************************************

  FILE NAME: EV50137S.DAT
  TIME/DATE OF STUDY: 13:47 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    137.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   67792.703 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.598 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.424
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.14;    6-HOUR =  3.15; 24-HOUR =  5.48
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
=============================================================================
```



```
 +-----------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     137.00| Subarea (UH) Added to Stream #1|       0.0     19864.0|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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******************************************************************************

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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 138)                   *
* 50-YR EV JMITAL SEPT 2017                                              *
 ************************************************************************

  FILE NAME: EV50138S.DAT
  TIME/DATE OF STUDY: 13:47 09/12/2017


                        ** INPUT SUMMARY **


******************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    138.00 IS CODE =   1
------------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==============================================================================
  WATERSHED AREA =   69125.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.680 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.425
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.44; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.14;    6-HOUR =  3.13; 24-HOUR =  5.46
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==============================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50138S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     138.00| Subarea (UH) Added to Stream #1|       0.0     19985.0|
18.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                   *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 139)                   *
* 50-YR EV JMITAL SEPT 2017                                              *
 *************************************************************************

  FILE NAME: EV50139S.DAT
  TIME/DATE OF STUDY: 13:48 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    139.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   69553.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.729 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.424
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.43; 30-MINUTE =  0.85;  1-HOUR =  1.17
    3-HOUR =  2.14;    6-HOUR =  3.13; 24-HOUR =  5.45
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
=============================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV50139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     139.00| Subarea (UH) Added to Stream #1|       0.0     19929.5|
17.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                 *
* EXISTING CONDITION - REGIONAL NODE 119                                *
* 100-YR EV JMITAL SEPT 2017                                            *
 *************************************************************************

  FILE NAME: EV00119S.DAT
  TIME/DATE OF STUDY: 11:47 09/05/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    119.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   49511.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.964 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.376
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.51; 30-MINUTE =  0.95;  1-HOUR =  1.32
    3-HOUR =  2.49;    6-HOUR =  3.72; 24-HOUR =  6.54
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.345; 30-MINUTE = 0.395;  1-HOUR = 0.435
    3-HOUR = 0.785;    6-HOUR = 0.904; 24-HOUR = 0.944
=============================================================================
```



```
 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00119S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     119.00| Subarea (UH) Added to Stream #1|       0.0     20325.6|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 126)                  *
* 100-YR  EXPECTED VALUE    MCHANDOO                                    *
 ************************************************************************

  FILE NAME: EV00126S.DAT
  TIME/DATE OF STUDY: 12:19 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    126.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   50518.000 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.046 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.379
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.51; 30-MINUTE =  0.95;  1-HOUR =  1.32
    3-HOUR =  2.48;    6-HOUR =  3.70; 24-HOUR =  6.50
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.341; 30-MINUTE = 0.392;  1-HOUR = 0.432
    3-HOUR = 0.782;    6-HOUR = 0.902; 24-HOUR = 0.943
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00126S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 10100.00     126.00| Subarea (UH) Added to Stream #1|       0.0     20351.6|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO - SINGLE AREA UH                                  *
* EXISTING CONDITION - REGIONAL NODE 127                                 *
* 100-YR EV JMITAL SEPT 2017                                             *
 **************************************************************************

  FILE NAME: EV00127S.DAT
  TIME/DATE OF STUDY: 12:25 09/05/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  10100.00 TO NODE    127.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   53146.699 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.159 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.298; LOW LOSS FRACTION = 0.385
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.50; 30-MINUTE =  0.95;  1-HOUR =  1.31
    3-HOUR =  2.45;    6-HOUR =  3.65; 24-HOUR =  6.40
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.332; 30-MINUTE = 0.384;  1-HOUR = 0.424
    3-HOUR = 0.774;    6-HOUR = 0.899; 24-HOUR = 0.941
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00127S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 | 10100.00     127.00| Subarea (UH) Added to Stream #1|       0.0     20460.1|
18.167 |             |           |
 +-------------------+--------------------------------+---------------------+-
----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 132C)                 *
* 100-YR  EXPECTED VALUE    MCHANDOO                                    *
 ************************************************************************

  FILE NAME: EV0032CS.DAT
  TIME/DATE OF STUDY: 15:06 11/14/2013


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    132.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4924.400 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    0.796 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.244; LOW LOSS FRACTION = 0.515
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.87;  1-HOUR =  1.15
    3-HOUR =  1.94;    6-HOUR =  2.71; 24-HOUR =  4.49
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.788; 30-MINUTE = 0.788;  1-HOUR = 0.788
    3-HOUR = 0.968;    6-HOUR = 0.984; 24-HOUR = 0.990
==========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0032CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     132.00| Subarea (UH) Added to Stream #1|       0.0      3626.7|
16.833 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133T)                 *
* 100-YR  EXPECTED VALUE    MCHANDOO                                    *
 ************************************************************************

  FILE NAME: EV0033TS.DAT
  TIME/DATE OF STUDY: 11:27 07/26/2018


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    7114.600 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.119 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.261; LOW LOSS FRACTION = 0.486
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.87;  1-HOUR =  1.15
    3-HOUR =  1.94;    6-HOUR =  2.71; 24-HOUR =  4.49
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.731; 30-MINUTE = 0.731;  1-HOUR = 0.731
    3-HOUR = 0.956;    6-HOUR = 0.977; 24-HOUR = 0.986
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0033TS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0      3985.5|
17.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133U)                 *
* 100-YR  EXPECTED VALUE    MCHANDOO                                    *
 ************************************************************************

  FILE NAME: EV0033US.DAT
  TIME/DATE OF STUDY: 15:17 11/14/2013


                        ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   54112.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.288 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.297; LOW LOSS FRACTION = 0.388
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.50; 30-MINUTE =  0.94;  1-HOUR =  1.31
    3-HOUR =  2.44;    6-HOUR =  3.63; 24-HOUR =  6.37
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.329; 30-MINUTE = 0.381;  1-HOUR = 0.422
    3-HOUR = 0.771;    6-HOUR = 0.898; 24-HOUR = 0.940
========================================================================
```



```
 +-------------------------------------------------------------------------------
-------------------------------------+
 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0033US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0     20361.0|
18.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```

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**************************************************************************

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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 133C)                 *
* 100-YR  EXPECTED VALUE    MCHANDOO                                    *
 ************************************************************************

  FILE NAME: EV0033CS.DAT
  TIME/DATE OF STUDY: 15:19 11/14/2013


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    133.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   61227.500 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.288 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.398
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.49; 30-MINUTE =  0.94;  1-HOUR =  1.29
    3-HOUR =  2.38;    6-HOUR =  3.53; 24-HOUR =  6.15
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.308; 30-MINUTE = 0.362;  1-HOUR = 0.408
    3-HOUR = 0.753;    6-HOUR = 0.891; 24-HOUR = 0.936
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0033CS.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     133.00| Subarea (UH) Added to Stream #1|       0.0     21636.4|
18.333 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                        Analysis prepared by:

                      Michael Baker International
                    5 Hutton Centre Drive, Suite 500
                             Santa Ana, CA
                                 92707

 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134T)                 *
* 100-YR EV JMITAL SEPT 2018                                            *
 ************************************************************************

  FILE NAME: EV0034TS.DAT
  TIME/DATE OF STUDY: 11:26 07/26/2018


                         ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE  13500.00 TO NODE    134.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =    4082.800 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    1.245 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.294; LOW LOSS FRACTION = 0.420
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.40; 30-MINUTE =  0.87;  1-HOUR =  1.15
    3-HOUR =  1.94;    6-HOUR =  2.71; 24-HOUR =  4.49
  *USER SPECIFIED PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.818; 30-MINUTE = 0.818;  1-HOUR = 0.818
    3-HOUR = 0.973;    6-HOUR = 0.986; 24-HOUR = 0.992
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0034TS.DAT   ]
Page:   1 of    |
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-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 | 13500.00     134.00| Subarea (UH) Added to Stream #1|       0.0      2415.1|
17.250 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134U)                 *
* 100-YR EV JMITAL SEPT 2017                                            *
 *************************************************************************

  FILE NAME: EV0034US.DAT
  TIME/DATE OF STUDY: 14:12 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   62471.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.381 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.399
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.49; 30-MINUTE =  0.93;  1-HOUR =  1.29
    3-HOUR =  2.37;    6-HOUR =  3.51; 24-HOUR =  6.12
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.304; 30-MINUTE = 0.359;  1-HOUR = 0.405
    3-HOUR = 0.751;    6-HOUR = 0.890; 24-HOUR = 0.936
=============================================================================
```



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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0034US.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0     21792.4|
18.000 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 134C)                 *
* 100-YR EV JMITAL SEPT 2017                                            *
 *************************************************************************

  FILE NAME: EV0034CS.DAT
  TIME/DATE OF STUDY: 14:12 09/12/2017


                        ** INPUT SUMMARY **


*****************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    134.00 IS CODE =   1
-----------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
=============================================================================
  WATERSHED AREA =   66553.898 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.381 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.399
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.28
    3-HOUR =  2.35;    6-HOUR =  3.46; 24-HOUR =  6.02
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.294; 30-MINUTE = 0.352;  1-HOUR = 0.397
    3-HOUR = 0.741;    6-HOUR = 0.887; 24-HOUR = 0.933
=============================================================================
```



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 +-----------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV0034CS.DAT   ]
Page:   1 of    |
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-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 |     0.00     134.00| Subarea (UH) Added to Stream #1|       0.0     22661.1|
18.000 |             |           |
 +-------------------+--------------------------------+---------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 137)                  *
* 100-YR EV JMITAL SEPT 2017                                            *
 ************************************************************************

  FILE NAME: EV00137S.DAT
  TIME/DATE OF STUDY: 14:13 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    137.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   67792.703 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.490 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.400
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.28
    3-HOUR =  2.34;    6-HOUR =  3.45; 24-HOUR =  5.99
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.291; 30-MINUTE = 0.350;  1-HOUR = 0.394
    3-HOUR = 0.738;    6-HOUR = 0.886; 24-HOUR = 0.933
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00137S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     137.00| Subarea (UH) Added to Stream #1|       0.0     22727.7|
18.083 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                         Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 138)                  *
* 100-YR EV JMITAL SEPT 2017                                            *
 ************************************************************************

  FILE NAME: EV00138S.DAT
  TIME/DATE OF STUDY: 14:13 09/12/2017


                        ** INPUT SUMMARY **


**************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    138.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
==========================================================================
  WATERSHED AREA =   69125.297 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.568 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.293; LOW LOSS FRACTION = 0.401
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.27
    3-HOUR =  2.33;    6-HOUR =  3.43; 24-HOUR =  5.96
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.287; 30-MINUTE = 0.348;  1-HOUR = 0.392
    3-HOUR = 0.734;    6-HOUR = 0.885; 24-HOUR = 0.932
==========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00138S.DAT   ]
Page:   1 of    |
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-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     138.00| Subarea (UH) Added to Stream #1|       0.0     22877.7|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
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   END OF FLOODSCx ROUTING ANALYSIS
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                          Analysis prepared by:




 ************************* DESCRIPTION OF STUDY *************************
* RANCHO MISSION VIEJO                                                  *
* EXISTING CONDITION - UH SINGLE AREA MODEL (NODE 139)                  *
* 100-YR EV JMITAL SEPT 2017                                            *
 ************************************************************************

  FILE NAME: EV00139S.DAT
  TIME/DATE OF STUDY: 14:13 09/12/2017


                        ** INPUT SUMMARY **


************************************************************************
  FLOW PROCESS FROM NODE      0.00 TO NODE    139.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>SUBAREA RUNOFF (UNIT-HYDROGRAPH ANALYSIS) ADDED TO STREAM #1<<<<<
========================================================================
  WATERSHED AREA =   69553.102 ACRES; BASEFLOW =   0.000 CFS/SQUARE-MILE
  *USER ENTERED "LAG" TIME =    2.614 HOURS
  VALLEY(DEVELOPED) S-GRAPH SELECTED
  MAXIMUM WATERSHED LOSS RATE(INCH/HOUR) =  0.292; LOW LOSS FRACTION = 0.401
  SPECIFIED PEAK RAINFALL DEPTHS(INCH):
  5-MINUTE =  0.48; 30-MINUTE =  0.93;  1-HOUR =  1.27
    3-HOUR =  2.33;    6-HOUR =  3.43; 24-HOUR =  5.95
  PRECIPITATION DEPTH-AREA REDUCTION FACTORS:
  5-MINUTE = 0.286; 30-MINUTE = 0.348;  1-HOUR = 0.391
    3-HOUR = 0.733;    6-HOUR = 0.885; 24-HOUR = 0.932
========================================================================
```



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 +-------------------------------------------------------------------------------
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 |                                      * AES FLOODSCx PROGRAM RESULTS SUMMARY *
|
 |INPUT FILENAME: [EV00139S.DAT   ]
Page:   1 of    |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |UPSTREAM  DOWNSTREAM|                                | UPSTREAM   DOWNSTREAM|
TIME(2) TO | MAX. STORAGE|           |
 | NODE #     NODE #  | HYDROLOGIC/HYDRAULIC PROCESS   |PEAK (CFS)  PEAK (CFS)|
PEAK (HR)  | MODELED (AF)| FOOTNOTES |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |     0.00     139.00| Subarea (UH) Added to Stream #1|       0.0     22805.3|
18.167 |             |           |
 +-------------------+--------------------------------+----------------------+-
-----------+-------------+-----------+
 |Notes: 1 = BASIN MODEL VOLUME EXCEEDED; 2 = TIME IS AT END OF 5-MINUTE UNIT
INTERVAL                                |
 |       3 = RUNOFF ESTIMATES DO NOT EXTEND PAST 2 DAYS AFTER THE PEAK DAY OF
THE DESIGN STORM                        |
 +-------------------------------------------------------------------------------
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   END OF FLOODSCx ROUTING ANALYSIS
```