Section 12

Stormwater Management

Section 12. Stormwater Management

12.1 State Standards

Pursuant to the State's Site Law, the Project must meet the Department's Basic, General and Flooding standards.

12.2 Narrative

1. Development location

The Applicant proposes to construct the Project, a three-turbine wind energy facility in the Town of Rumford on South Twin Mountain, with associated infrastructure in both Rumford and the adjacent Town of Roxbury. The installed capacity of the Project is expected to be 18.3 MW. The Project wind turbines will be on South Twin Mountain (elevation 1,964ft to 2,135ft). The lot in Rumford where the turbines are sited is approximately 618.1± acres while the proposed Project footprint is 37.81± acres. The total project footprint includes everything within the clearing limits, gravel roads, turbines, overhead electrical lines and stormwater management features. The proposed roads include approximately 24' wide access roads and 39.5' wide crane paths. Once the turbines have been erected, all the crane paths and some of the access roads will have a treatment swale constructed along the downhill side of the road for stormwater treatment. The permanent road width of the crane paths and access roads will be 25.5' and 14' respectively. The total length of new roads is 10,760 feet. Turbine clearing areas will be stabilized and allowed to revegetate to a meadow buffer with the exception of the following: a 35-foot radius around the base of each turbine; 70-foot by 120-foot crane pads at each turbine; and a short 24-foot wide access drive to each of the crane pads. The total impervious area for the Project, including the access drives, crane paths, crane pads and turbine foundations, is approximately 5.26± acres. The construction plans, including the stormwater design, have been designed and engineered by Sewall, a Maine-licensed professional engineer.

As part of the Site Law application, the Project must meet the MDEP's Basic, General and Flooding standards.

The Project's runoff flows to a couple unnamed streams on-site. The runoff ultimately flows to the Swift River.

2. Surface water on or abutting the site

The site has mapped freshwater wetlands and streams. (See Exhibit 7-13.)

3. Downstream ponds and lakes

There are no ponds or lakes downstream from the site.

4. General topography

The general topography on the site is steep slopes. The project sits near the top of a ridgeline. The slopes range from approx. 2-50% with flatter slopes near the ridgeline and wetlands. See topographic data on the attached project plans, Exhibit 1-1.

5. Flooding

The site has not experienced historic flooding. The site does not lie within a "special flood hazard area" as depicted on floodway maps prepared by the Federal Emergency Management Agency. See attached Flood Map in Section 19.

6. Alterations to natural drainage ways

No significant changes to the currently existing channel geometry and/or alignment are proposed for this work. See construction plans in Exhibit 1-3.

7. Alterations to land cover

Some changes will be made to the land cover regarding the road and turbine pad construction. See construction plans in Exhibit 1-3.

8. Modeling Assumptions

Criteria used to establish a viable stormwater management plan are as follows:

- Maintain existing flow paths and discharge points to the extent possible;
- Maintain current runoff curve numbers for watershed;
- Provide MDEP prescribed levels of water quality treatment for the developed area; and
- Avoid disturbance of existing wetlands to the maximum extent practicable.

The runoff curve numbers ("CNs") determined by ground cover and soil types (Section 11), were calculated to compare the pre- and post-development conditions. Soils found on the site were predominantly Hydrologic Group D soils with some B and C soils. The curve number calculations were adjusted to add the revised land cover (meadow and gravel) associated with the proposed

development. No significant changes to the curve numbers were noted; therefore, there were no significant changes in the runoff rate as a result of the proposed Project.

See Exhibit 12-2 for the supporting calculations for further modeling assumptions.

9. Water Quantity Control

Water quantity calculations were performed using a runoff curve number ("CN") comparison as a check. It was determined there was no significant change in the CN therefore there would be no significant change in the runoff rate. See the supporting calculations at the end of this section.

10. Water Quality Treatment

The water quality standard had to be met for this Project due to the amount of development on the site. This was accomplished by using treatment swales alongside the proposed roads to treat the runoff from the new impervious area. The turbine pads will be revegetated to meadow buffers to treat the runoff from the crane pads. These measures will allow the stormwater runoff to be collected and treated before the runoff leaves the property.

See construction plans in Exhibit 1-3 for the location and configuration of the stormwater management features.

11. Offset Credits

Not Applicable.

12. Compensation Fees

The Project was designed to have less than 15,000 square feet of direct impacts to wetlands.

The Applicant has been informed by NE ACOE that ACOE is applying a 5,000 square foot threshold for requiring compensatory mitigation to freshwater impacts in Maine, as proposed in the Public Notice dated April 25, 2023. As described in Section 7: Wildlife, the Applicant will continue to consult with NE ACOE on applicable compensation fees and pay any such fees prior to the start of construction.

13. Development Impact

The development will not impact the receiving waters. The Project has addressed the Maine DEP's Basic, General and Flooding standards. In meeting those standards, the receiving water, adjacent properties, downstream properties and downstream flow control structures have all been reviewed and potential impacts have been addressed.

See the attached construction plans, Exhibit 1-3, and calculations, Exhibit 12-2.

12.3 Map

See attached U.S.G.S topographical map in Section 1, Exhibit 1-1.

A soils map has been provided in the soils report in Section 11. The soils boundaries are shown on the pre- and post-development drainage sheets in the project plan set, Exhibit 1-3.

12.4 Drainage Plans

See the following pre- and post-development drainage plans.

1. Contours. See Project plans in Exhibit 1-3 for pre- and post-development plans.

2. Plan Elements. See Project plans in Exhibit 1-3 for pre- and post-development plans.

3. Land Cover Types and Boundaries. See Project plans in Exhibit 1-3 for pre- and post-development plans.

4. Soil Group Boundaries. See soils map in Section 11 along with the pre- and post-development plans in Exhibit 1-3.

5. Stormwater Quantity Subwatershed Boundaries. See Project plans in Exhibit 1-3 for pre- and post-development plans.

6. Stormwater Quality Subwatershed Boundaries. See Project plans in Exhibit 1-3 for subwatersheds boundaries for the quality analysis.

7. Watershed Analysis points. Not applicable. Curve number calculations were performed.

8. Hydrologic Flow Lines. Not applicable. Curve number calculations were performed.

9. Runoff Storage Areas. See Project plans in Exhibit 1-3 for post-development plans.

10. Roads and Drives. See Project plans in Exhibit 1-3 for the location of the roads and drives.

11. Buildings, parking lots, and other facilities. See Project plans in Exhibit 1-3 for the location of the roads and lots.

12. Drainage Systems. See Project plans in Exhibit 1-3 for the location of the culverts as part of the drainage system for the project.

13. Natural and Man-made Drainage ways. See Project plans in Exhibit 1-3.

14. Wetlands. See Project plans in Exhibit 1-3.

15. Flooded Areas. Currently the Property is not affected by flooding. See Section 19: Flooding.

16. Benchmark. Project benchmarks will be established by the contractor prior to construction.

17. Stormwater Detention, Retention and Infiltration Facilities. As part of the stormwater management plan treatment swales will be implemented to treat the quantity and quality of the stormwater runoff. See Exhibit 12-2 for the supporting calculations for the design features of the swales. See the project plans for the location and size of the treatment swales.

18. Stormwater Treatment Facilities. See Project plans in Exhibit 1-3 and Summary of Stormwater Calculations report for the location, size and design calculations stormwater treatment structures, at the end of this section.

19. Drainage Easements. Not applicable.

20. Identify Reaches, Ponds and Subwatersheds. See Project plans in Exhibit 1-3 and supporting calculations in Exhibit 12-2 for the location of the watersheds and treatment swales.

21. Buffers. Meadow buffers are being proposed on the turbine pads. Once the components have been installed the turbine pads will be revegetated except for a 120’x70’ crane pad and 35’ radius around the foundation, which will remain gravel. The rest of the pad will be reseeded as a meadow buffer. See

project plans, details and supporting calculations for the location of the buffers.

12.5 Runoff Analysis

1. Curve Number Computations. The curve number calculations were done. See the supporting calculations in Exhibit 12-2.

2. Time of Concentration Calculations. Not applicable.

3. Travel Time Calculations. Not applicable.

4. Peak Discharge Calculations. Not applicable.

5. Reservoir Routing Calculations. Not applicable.

12.6 Flooding Standard Submissions

The flooding standard will be addressed by collecting the runoff in the proposed treatment swale and constructing level spreaders. These structures are designed to collect, store and control the stormwater runoff. As part of the flooding standard the runoff at each of the property lines must meet or be less than the predevelopment flows. There is an insignificant increase in the curve number for the project, which indicates there may be a slight increase in the runoff rate from the project. However, with the use of the treatment swales and level spreaders being proposed within the watershed, the runoff will slow down and return to sheet flow before it leaves the property. These treatment swales and level spreaders have not been considered in the CN calculations. Calculations demonstrate that there will most likely not be any increase in runoff rate at the property line. The overall stormwater management system is designed to prohibit any adverse impact on areas downstream from the site.

See the calculations in Exhibit 12-2.

12.7 General Standards Submissions

1. Narrative
   In general, the stormwater management plan is designed to minimize the concentration of stormwater flows leaving the Project site. The primary components of the plan include minimizing areas permanently impacted by the Project and incorporating appropriate Best Management Practices (“BMPs”) into the Project design.

A large component of stormwater management includes minimizing the permanent impacts associated with the Project through systematic revegetation of disturbed areas. Turbine clearing areas will be stabilized and allowed to revegetate to a meadow buffer with the exception of the following: a 35-foot radius around the base of each turbine; 70-foot by 120-foot crane pads at each turbine; and a short 24-foot wide access drive to each of the crane pads.

Impacts to site hydrology from the proposed Project will also be minimized by the use of stormwater management BMPs. Due to the steep terrain within the Project site, traditional BMP methods have not been designed to treat the stormwater runoff from the project site. Sewall designed treatment swales throughout the Project. These treatment swales will be constructed alongside the permanent road and will be incorporated into the revegetation plan. Through proper installation and maintenance of BMPs, no significant water quality impacts to the watersheds will occur. The Project's runoff flows to the Swift River via small tributaries.

The general standard had to be met for this Project due to the amount of development on the site. This was accomplished by using a combination of buffers and stormwater treatment swales for treatment. The disturbed area for the project is 37.81± acres, which includes the access road, crane paths, turbine pads, graded areas and any areas with disturbed or exposed soil. The developed area for the Project is 5.26 ± acres, which includes the access road, crane paths, and turbine pads. The impervious area for the project is 5.26± acres, which includes the permanent access road, crane paths and crane pads. See the supporting calculations in Exhibit 12-2. See Project plans for the location and configuration of the stormwater management features.

2. Drainage Plans. See Project plans for the topographic features, drainageways, cover types, subcatchment boundaries, soils group boundaries for the pre and post development conditions. See the post development drainage plans for the type and locations of the stormwater treatment methods.

3. Calculations.
    a. *Water Volume*- See the support calculations in Exhibit 12-2.
    b. *Buffer Sizing*- See the support calculations in Exhibit 12-2.

4. Details, Designs, and Specifications.
    a. *Ponds*- Not Applicable.
    b. *Underdrain Vegetated Filters*- Not Applicable.

c. *Infiltration*
   i. Monitoring Wells- Not applicable
   ii. Surface Irrigation- Not applicable
   iii. Test Pits- See the test pit logs in Section 11 along with the plans showing the locations of the test pits in relation to the stormwater treatment swales.
   iv. Water Supply Wells-There are no water supply wells located within 300' of the treatment swales.
   v. Hazardous Materials Storage- Not applicable
   vi. Management Plans for Contaminants- Not applicable
   vii. Depth to Restrictive Layer- Test pit logs are in Section 11.
d. *Buffers*- See the project plans, details, test pit logs and support calculations.

5. Phosphorous Removal. Not applicable.

6. Responsible Party for Long-term Maintenance. During construction, the site will be inspected in accordance with the Maine DEP BMPs by someone with knowledge of erosion and stormwater control, including the standards and conditions in the permit. Once the Project construction is complete and is acceptable to the Applicant, the Applicant or assigned responsible party will be responsible for routine inspection and necessary maintenance. Responsibilities include the road, side slopes, turbine pads, ditches and erosion and sedimentation control management measures and stormwater treatment features. Responsibility for inspections and maintenance shall be defined to mean accountability for the actions taking place. In no way shall this document be construed to mean that the Applicant is qualified to perform any of those duties. The inspector shall be a qualified professional in the area of erosion and sedimentation control and storm water management. Acceptable professionals could include licensed professional engineers, or a contractor that is certified in erosion and sedimentation control by the State of Maine. All repairs and replacements shall be performed in accordance with the final, approved project plans and specifications.

12.8 Components of the Maintenance Plan

1. Person Responsible for Implementing the Maintenance Plan.
Contact Information:

Sumul Shah | Palmer
13 Elm Street, Suite 200
Cohasset, MA 02025

(781) 383-3200

If contact information changes over the life of the Project, the Applicant will provide updated information.

2. Specifies the Transfer Mechanism. The Applicant or assigned responsible party will be responsible for the inspections and maintenance of the Project. The contractor will be responsible for the routine inspections and maintenance during construction. Once the Applicant has accepted the Project as complete, the responsibility for routine inspections and maintenance will belong to the Applicant.

   See below for a list of measures for Inspection and Maintenance of the project during and after construction.

3. Facilities to be Maintained. List of measures for general inspection.
   a. Ditches
   b. Culverts
   c. Silt Fence and/or Bark Mulch Berms
   d. Buffers
   e. Roadside Slopes
   f. Level Spreaders
   g. Treatment Swales

4. Inspection and Maintenance Tasks. See the Inspection and Maintenance Plan in Exhibit 12-1.

5. Identifies any deed covenants, restrictions, or easements on the site. See the draft Meadow Buffer Deed Restrictions in Exhibit 12-1.

6. Maintenance Log. See the Stormwater Management Inspection Log in Exhibit 12-1.

7. Third Party Contracts. Not applicable.

12.9 Maintenance by a Homeowner Association

Not applicable.

12.10 Maintenance of Facilities by a Municipality or Quasi-Municipal District

Not applicable.

12.11 General inspection and maintenance requirement

Facilities requiring regular maintenance at the project site include the stormwater management system, roads, ditches, level spreaders, treatment swales and areas of stormwater buffers.

See the attached Inspection and Maintenance Plan and the Inspection and Maintenance Log in Exhibit 12-1.

Exhibit 12-1
Inspection and Maintenance Plan
Stormwater Management Inspection Checklist
Draft Meadow Buffer Deed Restrictions

INSPECTION AND MAINTENANCE PLAN

Long-term Maintenance Plan

At a minimum, inspect the following components twice annually on or about May 1 and November 1 and after severe storms:

1. Ditches

a. Rip-rap Lined Ditches:

- ♦ Inspect semi-annually.
- ♦ Remove sediment buildup, leaves, litter, or other debris from the bottom and side slopes.
- ♦ Reposition stones to restore channel to original dimensions.

b. Vegetated Ditches:

- ♦ Inspect the ditch lining monthly for slumping of the lining, downcutting of the ditch's base, or undercutting of the banks.
- ♦ Repair any damage immediately.
- ♦ Mow or brush-cut annually to prevent the establishment of woody vegetation

2. Culverts

- ♦ Inspect for sediment buildup.
- ♦ Flush pipes and remove sediment when depth of sediment at any location in the pipe exceeds three inches.

3. Rip-Rap Aprons, Level Spreaders, and Stone Bermed Level Lip Spreaders

- ♦ Inspect semi-annually or after severe storms for dislodged stones or slumping of the stone lining.
- ♦ Reposition stones to restore original dimensions of the pool and create a uniform surface.
- ♦ Clean any accumulated sediments and debris from the plunge pool.
- ♦ Cut and remove any woody vegetation growing within the pool.

4. Vegetation

- ♦ Inspect vegetated areas each spring.
- ♦ Re-seed and mulch areas where cover is less than 90 percent.
- ♦ Rework, seed, and mulch areas with spotty plant germination, sparse vegetation, or where soil erosion is evident.

5. Stones Check Dams

a. Prior to establishment of permanent vegetation:

- ♦ Inspect check dams after each storm event until permanent vegetation is established.
- ♦ Remove sediment buildup behind check dams.

b. After establishment of permanent vegetation:

- ♦ Inspect for sediment build-up in void space between stones and dislodged stones.
- ♦ Remove sediment build-up.

- ♦ Seed and mulch disturbed areas.
- ♦ Replace check dams if sediment is filling void space.
- ♦ Replace dislodged stones.

6. Road Grading

- ♦ Grade the road to maintain the proposed roadway crown or super elevation and to prevent the creation of berms or ruts that may channelize flow.

7. Buffers

- ♦ Delineate and maintain delineation of buffer limits.
- ♦ Inspect wooded buffers for evidence of erosion or concentrated flows.
- ♦ Repair, seed, and mulch eroded areas.
- ♦ Do not remove vegetation or trees other than dead plants and debris for the buffer.
- ♦ Maintain a specific and stable footpath and do not walk unnecessarily within the buffer.

8. Underdrain Soil Filters

a. Inspect after every major storm event in the first few months to ensure proper function and once every six months after that to ensure that the filter is draining within 24 hours.

b. Maintenance.

- ♦ The top several inches of the filter shall be replaced with fresh material when the water ponds on the surface of the bed for more than 72 hours.
- ♦ Sediment and plant debris should be removed from the pretreatment structure for the Underdrain Soil Filter at least annually.
- ♦ Filters with grass cover should be mowed no more than 2 times per growing season to maintain grass heights less than 12 inches.
- ♦ Fertilization of the Underdrain Soil Filter area should be avoided unless absolutely necessary to establish vegetation.
- ♦ Harvesting and pruning the Soil Filter needs to be done occasionally for the excessive growth. Remove the invasive plants as necessary.

9. Treatment Swales

a. Inspect after every major storm event in the first few months to ensure proper function and once every six months after that to ensure that the swale is draining within 24 hours.

b. Maintenance.

- ♦ The top several inches of the filter shall be replaced with fresh material when the water ponds on the surface of the bed for more than 72 hours.
- ♦ Swales with grass cover should be mowed no more than 2 times per growing season to maintain grass heights less than 12 inches.
- ♦ Fertilization of the Treatment Swale should be avoided unless absolutely necessary to establish vegetation.
- ♦ Harvesting and pruning the Swale needs to be done occasionally for the excessive growth. Remove the invasive plants as necessary.

Minimum Annual Maintenance

1. Side Slopes of Gravel Surfaces

- ♦ Inspect slopes for rill erosion due to concentrated flows

2. Level Spreaders and Stone Bermed Level Lip Spreaders

- ♦ Inspect and verify that top of stone is level (+/- one inch).
- ♦ Repair level lip to distribute flows uniformly across the buffer.
- ♦ Inspect stone to ensure that it remains clean and free of sediment and is in place as designed.
- ♦ Remove sediments, replace any dislodged stone, and maintain lip level to disperse flows uniformly across the buffer area.

3. Underdrain Soil Filters

a. Inspect after every major storm event in the first few months to ensure proper function and once every six months after that to ensure that the filter is draining within 24 hours.

b. Maintenance.

- ♦ Sediment and plant debris should be removed from the pretreatment structure for the Underdrain Soil Filter at least annually.
- ♦ Filters with grass cover should be mowed no more than 2 times per growing season to maintain grass heights less than 12 inches.
- ♦ Harvesting and pruning the Soil Filter needs to be done occasionally for the excessive growth. Remove the invasive plants as necessary.

4. Wooded Buffers

- ♦ Delineate and maintain delineation of buffer limits.
- ♦ Inspect wooded buffers for evidence of erosion or concentrated flows.
- ♦ Inform abutters of limitations on activities in buffers in order to maintain vegetation and organic duff.
- ♦ Repair, seed, and mulch eroded areas.
- ♦ Do not remove vegetation or trees other than dead plants and debris for the buffer.
- ♦ Maintain a specific and stable footpath and do not walk unnecessarily within the buffer.

5. Treatment Swale

a. Inspect after every major storm event in the first few months to ensure proper function and once every six months after that to ensure that the swale is draining within 24 hours.

b. Maintenance.

- ♦ Swales with grass cover should be mowed no more than 2 times per growing season to maintain grass heights less than 12 inches.
- ♦ Harvesting and pruning the Swale needs to be done occasionally for the excessive growth. Remove the invasive plants as necessary

STORMWATER MANAGEMENT INSPECTION CHECKLIST

	Inspected By/ Date:	Action Taken/ Date
Silt Fencing:		
a. Bottom of fence		
b. Sediment Build-Up		
c. Rips, Tears, Holes		
Ditches and Swales:	Inspected By/ Date:	Action Taken/ Date
a. Check Dams		
b. Erosion of Ditches		
c. Slumping of Ditch Banks		
d. Short-Circuiting by Check Dams		
e. Accumulation of Sediment		
Roadside Slopes:	Inspected By/ Date:	Action Taken/ Date
a. Erosion of slopes		
b. Established vegetation		
Culverts:	Inspected By/ Date:	Action Taken/ Date
a. Pipe Openings		
b. Sumps		
c. Frost Action		
d. Inlet / Outlet Protection		
Level Spreader & Spillway:	Inspected By/ Date:	Action Taken/ Date
a. Short-Circuiting		
b. Sediment Build-Up		
c. Spillway Erosion		
Buffers:	Inspected By/ Date:	Action Taken/ Date
a. Sediment Build-Up		
b. Erosion, Bare Soil		
c. Vegetation		
Treatment Swales:	Inspected By/ Date:	Action Taken/ Date
a. Sediment Build-Up		
b. Erosion, Bare Soil		
c. Short Circuiting		
d. Spillway Erosion		

*NOTE: Refer to Inspection & Maintenance Plan for inspection intervals, acceptable and unacceptable conditions, and remedies for unacceptable conditions.

DRAFT MEADOW BUFFER DEED RESTRICTIONS

DECLARATION OF RESTRICTIONS
(Non-Wooded Meadow Buffer)

THIS DECLARATION OF RESTRICTIONS is made this _____day of _____, 20___, by Twin Energy LLC., 13 Elm Street, Suite 200, Cohasset, Massachusetts, Norfolk County, Massachusetts 02025, (herein referred to as the "Declarant"), pursuant to a permit received from the Maine Department of Environmental Protection under the Stormwater Management Law, to preserve a buffer area on a parcel of land near Turbines 1, 2 and 3 of the Twin Energy project located in Rumford, Maine on South Twin Mountain.

WHEREAS, the Declarant holds title to certain real property situated in Rumford, Maine described in a deed from A&B Forestry, INC. to Twin Energy, LLC., dated August 20, 2021, and recorded in Book 5640 Page 911 at the Oxford County Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain restrictions, under the terms and conditions herein, over a portion of said real property (hereinafter referred to as the "Restricted Buffer") described as follows: (Note: Insert description of restricted buffer location here)

WHEREAS, pursuant to the Stormwater Management Law, 38 M.R.S. Section 420-D and Chapter 500 of rules promulgated by the Maine Board of Environmental Protection ("Stormwater Management Rules"), Declarant has agreed to impose certain restrictions on the Restricted Buffer Area as more particularly set forth herein and has agreed that these restrictions may be enforced by the Maine Department of Environmental Protection or any successor (hereinafter the "MDEP"),

NOW, THEREFORE, the Declarant hereby declares that the Restricted Buffer Area is and shall forever be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein. The Restrictions shall run with the Restricted Buffer Area and shall be binding on all parties having any right, title or interest in and to the Restricted Buffer Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Restricted Buffer Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Restricted Buffer Area subject to the Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Restrictions hereinafter set forth.

1. **Restrictions on Restricted Buffer Area**. Unless the owner of the Restricted Buffer Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Restricted Buffer Area must

remain undeveloped in perpetuity. To maintain the ability of the Restricted Buffer Area to filter and absorb stormwater, and to maintain compliance with the Stormwater Management Law and the permit issued thereunder to the Declarant, the use of the Restricted Buffer Area is hereinafter limited as follows.

a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, trash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or other fill material will be placed, stored or dumped on the Restricted Buffer Area, nor may the topography or the natural mineral soil of the area be altered or manipulated in any way;

b. A dense cover of grassy vegetation must be maintained over the Restricted Buffer Area, except that shrubs, trees and other woody vegetation may also be planted or allowed to grow in the area. The Restricted Buffer Area may not be maintained as a lawn or used as a pasture. If vegetation in the Restricted Buffer Area is mowed, it may be mown no more than two times per year.

c. No building or other temporary or permanent structure may be constructed, placed or permitted to remain on the Restricted Buffer Area, except for a sign, utility pole or fence (whether constructed of wood, steel or other materials) and appurtenant equipment such as guys and guy anchors;

d. No trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment may be permitted on the Restricted Buffer Area, except for vehicles used in mowing;

e. Any level lip spreader directing flow to the Restricted Buffer Area must be regularly inspected and adequately maintained to preserve the function of the level spreader.

Any activity on or use of the Restricted Buffer Area inconsistent with the purpose of these Restrictions is prohibited. Any future alterations or changes in use of the Restricted Buffer Area must receive prior approval in writing from the MDEP. The MDEP may approve such alterations and changes in use if such alterations and uses do not impede the stormwater control and treatment capability of the Restricted Buffer Area or if adequate and appropriate alternative means of stormwater control and treatment are provided.

2. **Enforcement**. The MDEP may enforce any of the Restrictions set forth in Section 1 above.

3. **Binding Effect**. The restrictions set forth herein shall be binding on any present or future owner of the Restricted Buffer Area. If the Restricted Buffer Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions to the extent that any of the Restricted Buffer Area is included within such owner's property.

4. **Amendment**. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Restricted Buffer Area and by the MDEP.

5. **Effective Provisions of Declaration**. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Restricted Buffer Area.

6. **Severability**. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.

7. **Governing Law**. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

_____
(NAME)

STATE OF MAINE, _____, County, dated _____, 20__ .
(County)

Personally appeared before me the above named _____, who swore to the truth of the foregoing to the best of (his/her) knowledge, information and belief and acknowledged the foregoing instrument to be (his/her) free act and deed.

_____
Notary Public

_____

EXHIBIT 12-2
Summary of Stormwater Calculations
CN Calculations
Quality Calculations
Hydrocad Model for Culvert and Level Spreader Sizing

SUMMARY OF STORMWATER CALCULATIONS

The project, due to its size and location, is subject to the BMP standards which includes the Basic, General and the Flooding standards of stormwater management. The purpose of the BMP standard is to include treatment measures that will mitigate for the increase of channel erosive flows, treat the pollutants effectively, and to mitigate for the potential temperature impacts due to the runoff from the proposed site. The project must also meet the flooding standard for the 2, 10 and 25 year-storm event to prevent flooding down gradient of the site.

The applicant proposes to meet the required **BMP standard** by doing the following:

For the Twin Energy Wind project, the applicant proposes to use a combination of buffers and stormwater treatment swales to treat the runoff from the proposed site. These methods collect runoff from 80.09% of the linear impervious surface and 80.09% of the linear developed area, which meets the DEP requirements for treatment. As per the regulations, the impervious area of the project must have 75% treatment for linear portions of the project and developed area must meet at least 50% treatment for the linear portions of the project. Attached is a spreadsheet that summarizes the method of treatment, with their sizes, the contributing area of impervious surface and developed area and the percentage of the project's treatment met with each treatment system.

The applicant proposes to meet the **Flooding standard** as follows:

The flooding standard will be addressed by collecting the runoff in the proposed treatment swales and the utilization of level spreaders. These structures are designed to collect, store and control the stormwater runoff. As part of the flooding standard the runoff at each of the property lines must meet or be less than the predevelopment flows. There is an insignificant increase in the curve number for the project, which indicates there may be a slight increase in the runoff rate from the project. With the use of the treatment swales and level spreaders being proposed within the watershed, the runoff will slow down and be returned to sheet flow before it leaves the property. These treatment swales and level spreaders have not been considered in the CN calculations. Therefore, there will most likely not be any increase in runoff rate at the property line. The overall stormwater management system is designed to prohibit any adverse impact on areas downstream from the site. See the attached calculations.

Attached is the Hydrocad report, CN calculations, outlet calculations, level spreader calculations, and stormwater quality calculations.

Project Name **Twin Energy**
Project Number **381.21.01**
Date 5/3/2023
Done by JAO

CN Value Calcs

PRE DEVELOPMENT

Watershed ID	AREA (SF)	WOODS				Meadow				Lawn				Gravel				Imp	% of	CN	Weighted
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	All	Area	Value	CN
		30	55	70	77	30	58	71	78	49	69	79	84	96	96	96	96	98			Value
1	11737657		285967	2443512	9008178														100.0%	75.01	75.01

Total Area = 11737657
269.46

100.00% **CN Value = 75.01**

POST DEVELOPMENT

Watershed ID	AREA (SF)	WOODS				Meadow				Lawn				Gravel				Imp	% of	CN	Weighted
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	All	Area	Value	CN
		30	55	70	77	30	58	71	78	49	69	79	84	96	96	96	96	98			Value
1	11737657		259928	2367455	8889923										26039	76057	118255		100%	75.46	75.46
																					0.0

Total Area = 11737657
269.46

100.00% **CN Value = 75.46**

Project Name	**Twin Energy**	BA=Buffer Adjacent to Small Imp	RB=Roadside buffer	
Project Number	**381.21.01**	BL=Buffer w/level spreader	DB=Detention basin	BRS=Roadside Buffer with Rock Sandwich
Date	9/14/2023	DT=Buffer w/ditch turnout	WP=Wet pond	
Done by	JAO	USF=Underdrain Soil Filter	INF=Infiltration	

QUALITY CALCULATIONS FOR LINEAR PORTION

Swift River

% of Project Treated for WS=	**80.09%**	>=	75%	Access rd width=	24	Crane path width=	39.5
Total Impervious Area for WS=	5.26	Acres		Access rd width(w/Tx)=	14	Crane path width(w/TxSwale)=	25.5

Roadway Alignment or Turbine Site	Access Crane Turbine	Station to Station		% of area	BMP No. (or none)	Side of road being Tx right, left, both	BMP cover Forest Meadow	Existing Imp Area Width	New Imp. Area (acres)	Imp Area to be Tx (acres)	Treatment Factor
Main Access	AccessTx	85	5500	100%	Tx1	BOTH		0	1.7404	1.7404	0.4
Main Access	Access	5500	7285	100%	NONE	BOTH		0	0.9835	0.9835	1
Main Access	CraneTx	7285	7840	100%	Tx5	BOTH		0	0.3249	0.3249	0.4
T1	Turbine			100%	BT1		Meadow	0	0.2740	0.2740	0.4
110 Road	CraneTx	11012	11055	100%	Tx5	BOTH		0	0.0252	0.0252	0.4
110 Road	CraneTx	11055	12275	100%	Tx2	BOTH		0	0.7142	0.7142	0.4
T2	Turbine			100%	BT2		Meadow	0	0.2740	0.2740	0.4
200 Road	AccessTx	20050	21125	100%	Tx3	BOTH		0	0.3455	0.3455	0.4
200 Road	AccessTx	21125	21220	100%	BT3	BOTH	Meadow	0	0.0305	0.0305	0.4
T3	Turbine			100%	BT3		Meadow	0	0.2740	0.2740	0.4
300 Road	CraneTx	30000	30100	100%	Tx3	BOTH		0	0.0585	0.0585	0.4
300 Road	CraneTx	30100	30155	100%	NONE	BOTH		0	0.0322	0.0322	1
300 Road	CraneTx	30155	30405	100%	Tx4	BOTH		0	0.1463	0.1463	0.4
Route 120	SCADA			100%	NONE	BOTH		0	0.0113	0.0113	1
Route 120	SCADA Turnaround			100%	NONE	BOTH		0	0.0070	0.0070	1
300 Road	MET+Conex			100%	NONE	BOTH		0	0.0130	0.0130	1
110 Road	ELEC TRANS			100%	Tx5	BOTH		0	0.0044	0.0044	0.4

Subcat Reach Pond Link

Routing Diagram for 2023-11-07 culvert check
Prepared by HP Inc., Printed 11/7/2023

Summary for Subcatchment WS 10+30:

Runoff = 0.89 cfs @ 12.04 hrs, Volume= 0.048 af, Depth> 0.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
25,637	77	Woods, Good, HSG D
2,707	96	Gravel surface, HSG C
28,344	79	Weighted Average
28,344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	150	0.2530	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.1	16	0.2530	2.51		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	166	Total			

Summary for Subcatchment WS 115+42:

Runoff = 1.53 cfs @ 12.13 hrs, Volume= 0.104 af, Depth> 0.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
47,988	77	Woods, Good, HSG D
10,460	96	Gravel surface, HSG C
58,448	80	Weighted Average
58,448		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0900	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.1	95	0.0800	1.41		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	204	0.1200	10.95	131.37	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
19.1	449	Total			

Summary for Subcatchment WS 12+40:

Runoff = 1.81 cfs @ 12.09 hrs, Volume= 0.112 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
68,060	77	Woods, Good, HSG D
2,605	96	Gravel surface, HSG C
70,665	78	Weighted Average
70,665		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	150	0.3670	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.1	775	0.2600	2.55		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	165	0.0060	5.55	88.78	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
15.7	1,090	Total			

Summary for Subcatchment WS 122+38:

Runoff = 2.22 cfs @ 12.09 hrs, Volume= 0.138 af, Depth> 0.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
73,140	77	Woods, Good, HSG D
8,888	96	Gravel surface, HSG C
82,028	79	Weighted Average
82,028		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.4	150	0.1500	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.1	173	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	167	0.0350	5.91	70.95	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
16.0	490	Total			

Summary for Subcatchment WS 14+35:

Runoff = 0.89 cfs @ 12.03 hrs, Volume= 0.045 af, Depth> 0.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
24,639	77	Woods, Good, HSG D
2,186	96	Gravel surface, HSG C
26,825	79	Weighted Average
26,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	150	0.3800	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.3	128	0.0080	6.41	102.52	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
10.3	278	Total			

Summary for Subcatchment WS 16+82:

Runoff = 7.55 cfs @ 12.15 hrs, Volume= 0.543 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
359,886	77	Woods, Good, HSG D
4,733	96	Gravel surface, HSG C
364,619	77	Weighted Average
364,619		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	150	0.1430	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.6	880	0.2700	2.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.3	1,030	Total			

Summary for Subcatchment WS 171+50:

Runoff = 1.42 cfs @ 12.19 hrs, Volume= 0.113 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
26,096	71	Meadow, non-grazed, HSG C
22,966	70	Woods, Good, HSG C
10,307	74	>75% Grass cover, Good, HSG C
16,726	96	Gravel surface, HSG C
76,095	77	Weighted Average
76,095		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.4	100	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	368	0.0300	7.39	88.72	**Channel Flow, ditch** Area= 12.0 sf Perim= 15.0' r= 0.80' n= 0.030 Earth, grassed & winding
24.0	618	Total			

Summary for Subcatchment WS 18+55:

Runoff = 2.71 cfs @ 12.08 hrs, Volume= 0.164 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
107,750	77	Woods, Good, HSG D
2,340	96	Gravel surface, HSG C
110,090	77	Weighted Average
110,090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.4	835	0.4000	3.16		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	155	0.0190	9.90	118.80	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
14.9	1,140	Total			

Summary for Subcatchment WS 181+30:

Runoff = 0.81 cfs @ 12.21 hrs, Volume= 0.072 af, Depth> 0.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
77,785	70	Woods, Good, HSG C
77,785		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.7	50	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
2.0	363	0.0050	3.02	36.22	**Channel Flow, ditch** Area= 12.0 sf Perim= 15.0' r= 0.80' n= 0.030 Earth, grassed & winding
23.5	563	Total			

Summary for Subcatchment WS 2+05:

Runoff = 6.03 cfs @ 12.17 hrs, Volume= 0.464 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

	Area (sf)	CN	Description
	300,915	77	Woods, Good, HSG D
*	9,945	61	Treatment Swale
	1,496	96	Gravel surface, HSG C
	312,356	77	Weighted Average
	312,356		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	150	0.1670	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
8.9	930	0.1200	1.73		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.7	1,080	Total			

Summary for Subcatchment WS 20+50:

Runoff = 1.95 cfs @ 12.08 hrs, Volume= 0.118 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
77,556	77	Woods, Good, HSG D
1,800	96	Gravel surface, HSG C
79,356	77	Weighted Average
79,356		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.4	835	0.4000	3.16		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	155	0.0190	9.90	118.80	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
14.9	1,140	Total			

Summary for Subcatchment WS 200+80:

Runoff = 1.55 cfs @ 12.05 hrs, Volume= 0.085 af, Depth> 1.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
21,222	77	Woods, Good, HSG D
14,796	96	Gravel surface, HSG C
36,018	85	Weighted Average
36,018		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	117	0.1300	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"

Summary for Subcatchment WS 205+56:

Runoff = 2.27 cfs @ 12.03 hrs, Volume= 0.118 af, Depth> 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
42,737	77	Woods, Good, HSG D
16,287	96	Gravel surface, HSG C
59,024	82	Weighted Average
59,024		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.0	159	0.3300	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"

Summary for Subcatchment WS 22+00:

Runoff = 2.21 cfs @ 12.12 hrs, Volume= 0.159 af, Depth> 0.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
169,921	70	Woods, Good, HSG C
1,440	96	Gravel surface, HSG C
171,361	70	Weighted Average
171,361		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.5	910	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	96	0.0300	12.44	149.28	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.0	1,156	Total			

Summary for Subcatchment WS 23+25:

Runoff = 1.91 cfs @ 12.16 hrs, Volume= 0.143 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
95,376	77	Woods, Good, HSG D
1,080	96	Gravel surface, HSG C
96,456	77	Weighted Average
96,456		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.4	1,050	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	35	0.0150	8.80	105.56	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
21.9	1,235	Total			

Summary for Subcatchment WS 24+13:

Runoff = 2.23 cfs @ 12.16 hrs, Volume= 0.167 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
111,596	77	Woods, Good, HSG D
996	96	Gravel surface, HSG C
112,592	77	Weighted Average
112,592		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.4	1,050	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	35	0.0150	8.80	105.56	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
21.9	1,235	Total			

Summary for Subcatchment WS 25+06:

Runoff = 2.86 cfs @ 12.17 hrs, Volume= 0.218 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
133,112	77	Woods, Good, HSG D
4,838	96	Gravel surface, HSG C
137,950	78	Weighted Average
137,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	150	0.0930	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.9	820	0.3050	2.76		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	232	0.2700	21.19	381.45	**Trap/Vee/Rect Channel Flow,** Bot.W=3.00' D=2.00' Z= 3.0 '/' Top.W=15.00' n= 0.040 Mountain streams
22.6	1,202	Total			

Summary for Subcatchment WS 27+05:

Runoff = 2.89 cfs @ 12.09 hrs, Volume= 0.177 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
116,346	77	Woods, Good, HSG D
2,220	96	Gravel surface, HSG C
118,566	77	Weighted Average
118,566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	150	0.2800	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.8	640	0.3100	2.78		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	100	0.0620	17.88	214.60	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
15.2	890	Total			

Summary for Subcatchment WS 28+20:

Runoff = 1.72 cfs @ 12.05 hrs, Volume= 0.095 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
61,916	77	Woods, Good, HSG D
1,380	96	Gravel surface, HSG C
63,296	77	Weighted Average
63,296		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	365	0.3400	2.92		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
12.3	515	Total			

Summary for Subcatchment WS 30+00:

Runoff = 2.89 cfs @ 12.11 hrs, Volume= 0.188 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
124,161	77	Woods, Good, HSG D
2,160	96	Gravel surface, HSG C
126,321	77	Weighted Average
126,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.2500	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.3	908	0.3300	2.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.2	1,083	Total			

Summary for Subcatchment WS 30+45:

Runoff = 1.01 cfs @ 12.11 hrs, Volume= 0.066 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
40,042	77	Woods, Good, HSG D
1,320	96	Gravel surface, HSG C
41,362	78	Weighted Average
41,362		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.2500	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.3	908	0.3300	2.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.2	1,083	Total			

Summary for Subcatchment WS 301+27:

Runoff = 1.16 cfs @ 12.28 hrs, Volume= 0.110 af, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
64,421	77	Woods, Good, HSG D
5,319	96	Gravel surface, HSG C
69,740	78	Weighted Average
69,740		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.4	150	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
3.1	392	0.1800	2.12		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
31.5	542	Total			

Summary for Subcatchment WS 303+10:

Runoff = 1.99 cfs @ 12.15 hrs, Volume= 0.144 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
87,719	77	Woods, Good, HSG D
3,416	96	Gravel surface, HSG C
91,135	78	Weighted Average
91,135		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.6	150	0.0800	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	299	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	82	0.0300	5.47	65.68	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
20.9	531	Total			

Summary for Subcatchment WS 304+15:

Runoff = 1.39 cfs @ 12.15 hrs, Volume= 0.100 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
59,287	77	Woods, Good, HSG D
4,009	96	Gravel surface, HSG C
63,296	78	Weighted Average
63,296		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.6	150	0.0800	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	299	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.7	449	Total			

Summary for Subcatchment WS 31+15:

Runoff = 3.24 cfs @ 12.11 hrs, Volume= 0.215 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
143,160	77	Woods, Good, HSG D
840	96	Gravel surface, HSG C
144,000	77	Weighted Average
144,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	150	0.2630	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.1	1,000	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.7	1,175	Total			

Summary for Subcatchment WS 31+85:

Runoff = 1.09 cfs @ 12.11 hrs, Volume= 0.072 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
47,785	77	Woods, Good, HSG D
840	96	Gravel surface, HSG C
48,625	77	Weighted Average
48,625		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	150	0.2630	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.1	1,000	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.7	1,175	Total			

Summary for Subcatchment WS 32+50:

Runoff = 5.83 cfs @ 12.07 hrs, Volume= 0.346 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
228,024	77	Woods, Good, HSG D
3,636	96	Gravel surface, HSG C
0	70	Woods, Good, HSG C
231,660	77	Weighted Average
231,660		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.4200	0.26		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.6	825	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	190	0.0920	21.73	347.66	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
14.3	1,165	Total			

Summary for Subcatchment WS 36+55:

Runoff = 2.09 cfs @ 12.07 hrs, Volume= 0.123 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
81,253	77	Woods, Good, HSG D
1,416	96	Gravel surface, HSG C
0	70	Woods, Good, HSG C
82,669	77	Weighted Average
82,669		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.4200	0.26		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.6	825	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
14.2	975	Total			

Summary for Subcatchment WS 37+72:

Runoff = 1.10 cfs @ 12.07 hrs, Volume= 0.064 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
39,193	77	Woods, Good, HSG D
1,380	96	Gravel surface, HSG C
40,573	78	Weighted Average
40,573		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.3	150	0.3500	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.8	680	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	80	0.0900	21.49	343.86	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
14.2	910	Total			

Summary for Subcatchment WS 38+77:

Runoff = 2.30 cfs @ 12.06 hrs, Volume= 0.132 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
86,843	77	Woods, Good, HSG D
1,300	96	Gravel surface, HSG C
88,143	77	Weighted Average
88,143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	150	0.3270	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.7	610	0.5860	3.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	65	0.0230	10.89	130.71	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
13.4	825	Total			

Summary for Subcatchment WS 4+15:

Runoff = 1.72 cfs @ 12.10 hrs, Volume= 0.110 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
65,304	77	Woods, Good, HSG D
3,803	96	Gravel surface, HSG C
69,107	78	Weighted Average
69,107		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.2	130	0.1250	1.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.6	280	Total			

Summary for Subcatchment WS 40+45:

Runoff = 3.03 cfs @ 12.06 hrs, Volume= 0.172 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
105,775	77	Woods, Good, HSG D
2,868	96	Gravel surface, HSG C
108,643	78	Weighted Average
108,643		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	150	0.3270	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.7	610	0.5860	3.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	65	0.0230	10.89	130.71	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
13.4	825	Total			

Summary for Subcatchment WS 41+25:

Runoff = 2.64 cfs @ 12.09 hrs, Volume= 0.162 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
106,430	77	Woods, Good, HSG D
2,100	96	Gravel surface, HSG C
108,530	77	Weighted Average
108,530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	150	0.2100	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	565	0.5500	3.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	170	0.0650	18.31	219.73	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
15.3	885	Total			

Summary for Subcatchment WS 43+08:

Runoff = 2.47 cfs @ 12.11 hrs, Volume= 0.162 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
107,045	77	Woods, Good, HSG D
1,680	96	Gravel surface, HSG C
108,725	77	Weighted Average
108,725		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	575	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	95	0.0800	20.31	243.77	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.4	820	Total			

Summary for Subcatchment WS 44+45:

Runoff = 1.50 cfs @ 12.11 hrs, Volume= 0.099 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
65,569	77	Woods, Good, HSG D
600	96	Gravel surface, HSG C
66,169	77	Weighted Average
66,169		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	575	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	95	0.0800	20.31	243.77	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.4	820	Total			

Summary for Subcatchment WS 45+03:

Runoff = 2.99 cfs @ 12.04 hrs, Volume= 0.159 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
104,320	77	Woods, Good, HSG D
1,765	96	Gravel surface, HSG C
106,085	77	Weighted Average
106,085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	150	0.5700	0.30		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.6	565	0.5100	3.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	150	0.0430	14.89	178.72	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
11.3	865	Total			

Summary for Subcatchment WS 46+45:

Runoff = 2.96 cfs @ 12.05 hrs, Volume= 0.163 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
106,776	77	Woods, Good, HSG D
2,170	96	Gravel surface, HSG C
108,946	77	Weighted Average
108,946		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	150	0.4800	0.28		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.1	630	0.4700	3.43		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	30	0.0430	6.55	78.64	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
12.3	810	Total			

Summary for Subcatchment WS 5+82:

Runoff = 1.49 cfs @ 12.12 hrs, Volume= 0.099 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
60,296	77	Woods, Good, HSG D
2,284	96	Gravel surface, HSG C
62,580	78	Weighted Average
62,580		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	150	0.1430	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.3	504	0.2560	2.53		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.0	654	Total			

Summary for Subcatchment WS 50+90:

Runoff = 14.64 cfs @ 12.11 hrs, Volume= 0.961 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
13,719	77	Woods, Good, HSG D
7,857	96	Gravel surface, HSG C
622,955	77	Woods, Good, HSG D
644,531	77	Weighted Average
644,531		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	150	0.3800	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
7.4	1,168	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
17.4	1,318	Total			

Summary for Subcatchment WS 56+97:

Runoff = 10.37 cfs @ 12.21 hrs, Volume= 0.929 af, Depth> 0.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
15,978	77	Woods, Good, HSG D
5,437	96	Gravel surface, HSG C
984,105	70	Woods, Good, HSG C
1,005,520	70	Weighted Average
1,005,520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.8	150	0.2030	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
10.6	1,473	0.2150	2.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	260	0.0730	11.88	285.01	**Trap/Vee/Rect Channel Flow,** Bot.W=6.00' D=2.00' Z= 3.0 '/' Top.W=18.00' n= 0.040 Mountain streams
23.8	1,883	Total			

Summary for Subcatchment WS 58+85:

Runoff = 2.74 cfs @ 12.15 hrs, Volume= 0.196 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
129,392	77	Woods, Good, HSG D
2,580	96	Gravel surface, HSG C
131,972	77	Weighted Average
131,972		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
8.8	1,287	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.2	1,437	Total			

Summary for Subcatchment WS 61+00:

Runoff = 2.24 cfs @ 12.12 hrs, Volume= 0.151 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
99,071	77	Woods, Good, HSG D
2,400	96	Gravel surface, HSG C
101,471	77	Weighted Average
101,471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.8	1,000	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.2	1,150	Total			

Summary for Subcatchment WS 62+95:

Runoff = 1.52 cfs @ 12.13 hrs, Volume= 0.106 af, Depth> 0.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
64,988	77	Woods, Good, HSG D
1,920	96	Gravel surface, HSG C
66,908	78	Weighted Average
66,908		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	150	0.1800	0.19		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.0	960	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
19.4	1,110	Total			

Summary for Subcatchment WS 64+57:

Runoff = 2.37 cfs @ 12.41 hrs, Volume= 0.270 af, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
167,760	77	Woods, Good, HSG D
4,944	96	Gravel surface, HSG C
172,704	78	Weighted Average
172,704		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
38.8	130	0.0100	0.06		**Sheet Flow,** Grass: Bermuda n= 0.410 P2= 2.70"
2.2	430	0.4100	3.20		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	331	0.1500	12.24	146.87	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
41.5	891	Total			

Summary for Subcatchment WS 68+70:

Runoff = 2.29 cfs @ 12.32 hrs, Volume= 0.229 af, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
141,041	77	Woods, Good, HSG D
4,800	96	Gravel surface, HSG C
145,841	78	Weighted Average
145,841		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.7	120	0.0100	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
5.4	30	0.0700	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.2	332	0.0450	1.06		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.0	28	0.1400	11.82	141.89	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
34.3	510	Total			

Summary for Subcatchment WS 7+26:

Runoff = 6.68 cfs @ 12.12 hrs, Volume= 0.454 af, Depth> 0.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
303,561	77	Woods, Good, HSG D
1,339	96	Gravel surface, HSG C
304,900	77	Weighted Average
304,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.7	538	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.5	688	Total			

Summary for Subcatchment WS 72+75:

Runoff = 1.48 cfs @ 12.26 hrs, Volume= 0.135 af, Depth> 0.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
82,987	77	Woods, Good, HSG D
2,520	96	Gravel surface, HSG C
85,507	78	Weighted Average
85,507		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	125	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
2.1	25	0.5000	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.2	444	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.0	12	0.1700	13.03	156.36	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
29.8	606	Total			

Summary for Subcatchment WS 74+90:

Runoff = 2.60 cfs @ 12.30 hrs, Volume= 0.250 af, Depth> 0.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
121,052	77	Woods, Good, HSG D
20,255	96	Gravel surface, HSG C
141,307	80	Weighted Average
141,307		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	135	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
1.4	15	0.5000	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.6	624	0.1400	1.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
33.1	774	Total			

Summary for Subcatchment WS 76+10:

Runoff = 1.60 cfs @ 12.28 hrs, Volume= 0.149 af, Depth> 1.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 2-yr Rainfall=2.70"

Area (sf)	CN	Description
49,875	77	Woods, Good, HSG D
21,418	96	Gravel surface, HSG C
71,293	83	Weighted Average
71,293		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.4	150	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.1	25	0.5000	4.95		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.7	245	0.0490	1.11		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
32.2	420	Total			

Summary for Reach 1R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 1.42 cfs @ 12.19 hrs, Volume= 0.113 af
Outflow = 1.21 cfs @ 12.45 hrs, Volume= 0.110 af, Atten= 14%, Lag= 15.5 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.27 fps, Min. Travel Time= 9.3 min
Avg. Velocity = 0.10 fps, Avg. Travel Time= 24.6 min

Peak Storage= 676 cf @ 12.30 hrs
Average Depth at Peak Storage= 0.09'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 22.44 cfs

50.00' x 0.50' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 150.0' Slope= 0.1367 '/'
Inlet Invert= 2,085.00', Outlet Invert= 2,064.50'

Summary for Reach 2R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 0.76" for 2-yr event
Inflow = 1.21 cfs @ 12.45 hrs, Volume= 0.110 af
Outflow = 0.83 cfs @ 12.98 hrs, Volume= 0.105 af, Atten= 32%, Lag= 31.8 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.69 fps, Min. Travel Time= 18.9 min
Avg. Velocity = 0.33 fps, Avg. Travel Time= 40.2 min

Peak Storage= 947 cf @ 12.66 hrs
Average Depth at Peak Storage= 0.02'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 135.64 cfs

50.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 785.0' Slope= 0.3121 '/'
Inlet Invert= 2,064.50', Outlet Invert= 1,819.50'

Summary for Reach 3R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 0.72" for 2-yr event
Inflow = 0.83 cfs @ 12.98 hrs, Volume= 0.105 af
Outflow = 0.83 cfs @ 13.02 hrs, Volume= 0.105 af, Atten= 0%, Lag= 2.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.33 fps, Min. Travel Time= 1.2 min
Avg. Velocity = 1.71 fps, Avg. Travel Time= 2.3 min

Peak Storage= 58 cf @ 13.00 hrs
Average Depth at Peak Storage= 0.08'
Bank-Full Depth= 2.00' Flow Area= 18.0 sf, Capacity= 381.02 cfs

3.00' x 2.00' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 3.0 '/' Top Width= 15.00'
Length= 232.0' Slope= 0.2694 '/'
Inlet Invert= 1,819.50', Outlet Invert= 1,757.00'

‡

Summary for Reach 4R:

Inflow Area = 2.092 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.99 cfs @ 12.15 hrs, Volume= 0.144 af
Outflow = 1.97 cfs @ 12.17 hrs, Volume= 0.144 af, Atten= 1%, Lag= 0.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.43 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.31 fps, Avg. Travel Time= 1.5 min

Peak Storage= 67 cf @ 12.16 hrs
Average Depth at Peak Storage= 0.23'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 132.31 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 115.0' Slope= 0.1217 '/'
Inlet Invert= 2,046.00', Outlet Invert= 2,032.00'

Summary for Reach 5R:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.39 cfs @ 12.15 hrs, Volume= 0.100 af
Outflow = 1.36 cfs @ 12.21 hrs, Volume= 0.100 af, Atten= 2%, Lag= 3.5 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.02 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 1.15 fps, Avg. Travel Time= 5.3 min

Peak Storage= 165 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.19'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 131.67 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 365.0' Slope= 0.1205 '/'
Inlet Invert= 2,045.00', Outlet Invert= 2,001.00'

Summary for Reach 7R:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 0.88" for 2-yr event
Inflow = 2.22 cfs @ 12.09 hrs, Volume= 0.138 af
Outflow = 1.49 cfs @ 12.46 hrs, Volume= 0.134 af, Atten= 33%, Lag= 22.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.63 fps, Min. Travel Time= 14.6 min
Avg. Velocity = 0.26 fps, Avg. Travel Time= 34.8 min

Peak Storage= 1,308 cf @ 12.22 hrs
Average Depth at Peak Storage= 0.05'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 261.57 cfs

50.00' x 1.00' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 550.0' Slope= 0.1059 '/'
Inlet Invert= 2,043.25', Outlet Invert= 1,985.00'

‡

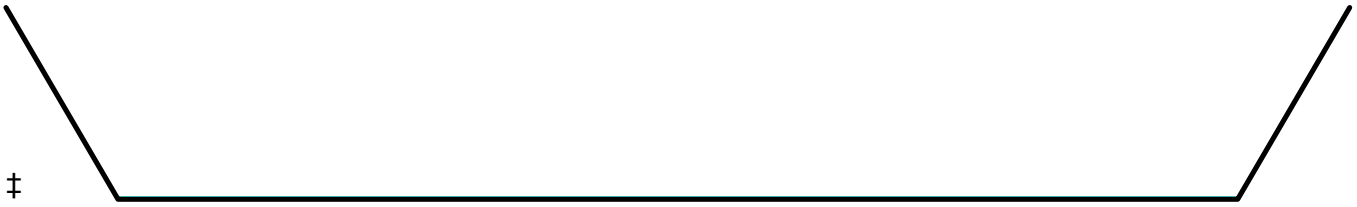
Summary for Reach 44R:

Inflow Area = 1.786 ac, 0.00% Impervious, Inflow Depth > 0.48" for 2-yr event
Inflow = 0.81 cfs @ 12.21 hrs, Volume= 0.072 af
Outflow = 0.74 cfs @ 12.38 hrs, Volume= 0.071 af, Atten= 9%, Lag= 10.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.87 fps, Min. Travel Time= 6.1 min
Avg. Velocity = 1.33 fps, Avg. Travel Time= 8.5 min

Peak Storage= 268 cf @ 12.28 hrs
Average Depth at Peak Storage= 0.01'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 732.88 cfs

50.00' x 0.50' deep channel, n= 0.025 Earth, clean & winding
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 680.0' Slope= 0.5695 '/'
Inlet Invert= 2,113.50', Outlet Invert= 1,726.25'



‡

Summary for Reach 123R:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 0.85" for 2-yr event
Inflow = 1.49 cfs @ 12.46 hrs, Volume= 0.134 af
Outflow = 1.47 cfs @ 12.50 hrs, Volume= 0.134 af, Atten= 1%, Lag= 2.5 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.23 fps, Min. Travel Time= 1.3 min
Avg. Velocity = 1.35 fps, Avg. Travel Time= 3.2 min

Peak Storage= 120 cf @ 12.47 hrs
Average Depth at Peak Storage= 0.19'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 140.35 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 261.0' Slope= 0.1370 '/'
Inlet Invert= 1,985.00', Outlet Invert= 1,949.25'

Summary for Pond 2+02: Stream Crossing

Inflow Area = 7.171 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 6.03 cfs @ 12.17 hrs, Volume= 0.464 af
Outflow = 6.03 cfs @ 12.17 hrs, Volume= 0.464 af, Atten= 0%, Lag= 0.0 min
Primary = 6.03 cfs @ 12.17 hrs, Volume= 0.464 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,759.46' @ 12.17 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,759.00'	**72.0" Round Culvert w/ 36.0" inside fill** L= 120.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,756.00' / 1,741.25' S= 0.1229 '/' Cc= 0.900 n= 0.013, Flow Area= 14.14 sf

Primary OutFlow Max=5.94 cfs @ 12.17 hrs HW=1,759.46' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.94 cfs @ 2.18 fps)

Summary for Pond 4+15:

Inflow Area = 1.586 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.72 cfs @ 12.10 hrs, Volume= 0.110 af
Outflow = 1.72 cfs @ 12.10 hrs, Volume= 0.110 af, Atten= 0%, Lag= 0.0 min
Primary = 1.72 cfs @ 12.10 hrs, Volume= 0.110 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.60' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**18.0" Round Culvert** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.00' / 1,746.50' S= 0.0643 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.72 cfs @ 12.10 hrs HW=1,751.60' (Free Discharge)
↑**1=Culvert** (Inlet Controls 1.72 cfs @ 2.63 fps)

Summary for Pond 5+82:

Inflow Area = 1.437 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.49 cfs @ 12.12 hrs, Volume= 0.099 af
Outflow = 1.49 cfs @ 12.12 hrs, Volume= 0.099 af, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 12.12 hrs, Volume= 0.099 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.05' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.50'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.50' / 1,749.00' S= 0.0375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.47 cfs @ 12.12 hrs HW=1,751.05' (Free Discharge)
↑**1=Culvert** (Inlet Controls 1.47 cfs @ 2.52 fps)

Summary for Pond 7+26: Stream Crossing

Inflow Area = 7.000 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 6.68 cfs @ 12.12 hrs, Volume= 0.454 af
Outflow = 6.68 cfs @ 12.12 hrs, Volume= 0.454 af, Atten= 0%, Lag= 0.0 min
Primary = 6.68 cfs @ 12.12 hrs, Volume= 0.454 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.65' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**48.0" Round Culvert w/ 24.0" inside fill** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.00' / 1,745.00' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 6.28 sf

Primary OutFlow Max=6.56 cfs @ 12.12 hrs HW=1,751.64' (Free Discharge)
1=Culvert (Inlet Controls 6.56 cfs @ 2.59 fps)

Summary for Pond 10+30:

Inflow Area = 0.651 ac, 0.00% Impervious, Inflow Depth > 0.88" for 2-yr event
Inflow = 0.89 cfs @ 12.04 hrs, Volume= 0.048 af
Outflow = 0.89 cfs @ 12.04 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 12.04 hrs, Volume= 0.048 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.70' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.25'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.25' / 1,742.50' S= 0.1750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.88 cfs @ 12.04 hrs HW=1,751.69' (Free Discharge)
1=Culvert (Inlet Controls 0.88 cfs @ 2.27 fps)

Summary for Pond 12+40:

Inflow Area = 1.622 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.81 cfs @ 12.09 hrs, Volume= 0.112 af
Outflow = 1.81 cfs @ 12.09 hrs, Volume= 0.112 af, Atten= 0%, Lag= 0.0 min
Primary = 1.81 cfs @ 12.09 hrs, Volume= 0.112 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,750.61' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.00'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.00' / 1,730.00' S= 0.2667 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.79 cfs @ 12.09 hrs HW=1,750.61' (Free Discharge)
1=Culvert (Inlet Controls 1.79 cfs @ 2.66 fps)

Summary for Pond 14+35:

Inflow Area = 0.616 ac, 0.00% Impervious, Inflow Depth > 0.88" for 2-yr event
Inflow = 0.89 cfs @ 12.03 hrs, Volume= 0.045 af
Outflow = 0.89 cfs @ 12.03 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 12.03 hrs, Volume= 0.045 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.44' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**15.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,728.00' S= 0.2667 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.86 cfs @ 12.03 hrs HW=1,748.44' (Free Discharge)
1=Culvert (Inlet Controls 0.86 cfs @ 2.25 fps)

Summary for Pond 16+82: Stream Crossing

Inflow Area = 8.371 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 7.55 cfs @ 12.15 hrs, Volume= 0.543 af
Outflow = 7.55 cfs @ 12.15 hrs, Volume= 0.543 af, Atten= 0%, Lag= 0.0 min
Primary = 7.55 cfs @ 12.15 hrs, Volume= 0.543 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,741.29' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,740.75'	**72.0" Round Culvert w/ 36.0" inside fill** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,737.75' / 1,734.00' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 14.14 sf

Primary OutFlow Max=7.51 cfs @ 12.15 hrs HW=1,741.28' (Free Discharge)
↑**1=Culvert** (Inlet Controls 7.51 cfs @ 2.36 fps)

Summary for Pond 18+55:

Inflow Area = 2.527 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.71 cfs @ 12.08 hrs, Volume= 0.164 af
Outflow = 2.71 cfs @ 12.08 hrs, Volume= 0.164 af, Atten= 0%, Lag= 0.0 min
Primary = 2.71 cfs @ 12.08 hrs, Volume= 0.164 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,744.27' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,743.50'	**18.0" Round Culvert** L= 58.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,743.50' / 1,732.00' S= 0.1983 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.66 cfs @ 12.08 hrs HW=1,744.26' (Free Discharge)
1=Culvert (Inlet Controls 2.66 cfs @ 2.97 fps)

Summary for Pond 20+50:

Inflow Area = 1.822 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 1.95 cfs @ 12.08 hrs, Volume= 0.118 af
Outflow = 1.95 cfs @ 12.08 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min
Primary = 1.95 cfs @ 12.08 hrs, Volume= 0.118 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,747.89' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,747.25'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,747.25' / 1,744.50' S= 0.0688 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.92 cfs @ 12.08 hrs HW=1,747.88' (Free Discharge)
1=Culvert (Inlet Controls 1.92 cfs @ 2.71 fps)

Summary for Pond 22+00:

Inflow Area = 3.934 ac, 0.00% Impervious, Inflow Depth > 0.49" for 2-yr event
Inflow = 2.21 cfs @ 12.12 hrs, Volume= 0.159 af
Outflow = 2.21 cfs @ 12.12 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min
Primary = 2.21 cfs @ 12.12 hrs, Volume= 0.159 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.68' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**18.0" Round Culvert** L= 60.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.00' / 1,739.00' S= 0.2000 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.16 cfs @ 12.12 hrs HW=1,751.68' (Free Discharge)
1=Culvert (Inlet Controls 2.16 cfs @ 2.80 fps)

Summary for Pond 23+25:

Inflow Area = 2.214 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 1.91 cfs @ 12.16 hrs, Volume= 0.143 af
Outflow = 1.91 cfs @ 12.16 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min
Primary = 1.91 cfs @ 12.16 hrs, Volume= 0.143 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,754.88' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,754.25'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,754.25' / 1,735.50' S= 0.2500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.89 cfs @ 12.16 hrs HW=1,754.88' (Free Discharge)
1=Culvert (Inlet Controls 1.89 cfs @ 2.70 fps)

Summary for Pond 24+13:

Inflow Area = 2.585 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.23 cfs @ 12.16 hrs, Volume= 0.167 af
Outflow = 2.23 cfs @ 12.16 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
Primary = 2.23 cfs @ 12.16 hrs, Volume= 0.167 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,756.94' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,756.25'	**18.0" Round Culvert** L= 91.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,756.25' / 1,731.00' S= 0.2775 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.20 cfs @ 12.16 hrs HW=1,756.93' (Free Discharge)
1=Culvert (Inlet Controls 2.20 cfs @ 2.81 fps)

Summary for Pond 25+06: Stream Crossing

Inflow Area = 4.914 ac, 0.00% Impervious, Inflow Depth > 0.79" for 2-yr event
Inflow = 2.87 cfs @ 12.17 hrs, Volume= 0.323 af
Outflow = 2.87 cfs @ 12.17 hrs, Volume= 0.323 af, Atten= 0%, Lag= 0.0 min
Primary = 2.87 cfs @ 12.17 hrs, Volume= 0.323 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,757.32' @ 12.17 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,757.00'	**60.0" Round Culvert w/ 30.0" inside fill** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,754.50' / 1,734.00' S= 0.2562 '/' Cc= 0.900 n= 0.013, Flow Area= 9.82 sf

Primary OutFlow Max=2.82 cfs @ 12.17 hrs HW=1,757.31' (Free Discharge)
1=Culvert (Inlet Controls 2.82 cfs @ 1.80 fps)

Summary for Pond 27+05:

Inflow Area = 2.722 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.89 cfs @ 12.09 hrs, Volume= 0.177 af
Outflow = 2.89 cfs @ 12.09 hrs, Volume= 0.177 af, Atten= 0%, Lag= 0.0 min
Primary = 2.89 cfs @ 12.09 hrs, Volume= 0.177 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.55' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.75'	**18.0" Round Culvert** L= 53.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.75' / 1,742.50' S= 0.1557 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.84 cfs @ 12.09 hrs HW=1,751.54' (Free Discharge)
1=Culvert (Inlet Controls 2.84 cfs @ 3.02 fps)

Summary for Pond 28+20:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 1.72 cfs @ 12.05 hrs, Volume= 0.095 af
Outflow = 1.72 cfs @ 12.05 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.0 min
Primary = 1.72 cfs @ 12.05 hrs, Volume= 0.095 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.92' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.25'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.25' / 1,748.85' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.71 cfs @ 12.05 hrs HW=1,749.92' (Free Discharge)
1=Culvert (Barrel Controls 1.71 cfs @ 3.72 fps)

Summary for Pond 30+00:

Inflow Area = 2.900 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.89 cfs @ 12.11 hrs, Volume= 0.188 af
Outflow = 2.89 cfs @ 12.11 hrs, Volume= 0.188 af, Atten= 0%, Lag= 0.0 min
Primary = 2.89 cfs @ 12.11 hrs, Volume= 0.188 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.96' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.25'	**24.0" Round Culvert** L= 60.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.25' / 1,741.00' S= 0.1208 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=2.85 cfs @ 12.11 hrs HW=1,748.96' (Free Discharge)
1=Culvert (Inlet Controls 2.85 cfs @ 2.87 fps)

Summary for Pond 30+45:

Inflow Area = 0.950 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.01 cfs @ 12.11 hrs, Volume= 0.066 af
Outflow = 1.01 cfs @ 12.11 hrs, Volume= 0.066 af, Atten= 0%, Lag= 0.0 min
Primary = 1.01 cfs @ 12.11 hrs, Volume= 0.066 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.73' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.25'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.25' / 1,746.50' S= 0.0437 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.00 cfs @ 12.11 hrs HW=1,748.72' (Free Discharge)
1=Culvert (Inlet Controls 1.00 cfs @ 2.35 fps)

Summary for Pond 31+15:

Inflow Area = 3.306 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 3.24 cfs @ 12.11 hrs, Volume= 0.215 af
Outflow = 3.24 cfs @ 12.11 hrs, Volume= 0.215 af, Atten= 0%, Lag= 0.0 min
Primary = 3.24 cfs @ 12.11 hrs, Volume= 0.215 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.76' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**24.0" Round Culvert** L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,744.50' S= 0.0778 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=3.19 cfs @ 12.11 hrs HW=1,748.75' (Free Discharge)
1=Culvert (Inlet Controls 3.19 cfs @ 2.95 fps)

Summary for Pond 31+85:

Inflow Area = 1.116 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 1.09 cfs @ 12.11 hrs, Volume= 0.072 af
Outflow = 1.09 cfs @ 12.11 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min
Primary = 1.09 cfs @ 12.11 hrs, Volume= 0.072 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.27' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.75'	**15.0" Round Culvert** L= 35.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.75' / 1,748.40' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.08 cfs @ 12.11 hrs HW=1,749.27' (Free Discharge)
1=Culvert (Barrel Controls 1.08 cfs @ 3.32 fps)

Summary for Pond 32+50: Stream Crossing

Inflow Area = 5.318 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 5.83 cfs @ 12.07 hrs, Volume= 0.346 af
Outflow = 5.83 cfs @ 12.07 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min
Primary = 5.83 cfs @ 12.07 hrs, Volume= 0.346 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.41' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.00'	**84.0" Round Culvert w/ 42.0" inside fill** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,745.50' / 1,729.50' S= 0.2286 '/' Cc= 0.900 n= 0.013, Flow Area= 19.24 sf

Primary OutFlow Max=5.68 cfs @ 12.07 hrs HW=1,749.40' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.68 cfs @ 2.04 fps)

Summary for Pond 36+55:

Inflow Area = 1.898 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.09 cfs @ 12.07 hrs, Volume= 0.123 af
Outflow = 2.09 cfs @ 12.07 hrs, Volume= 0.123 af, Atten= 0%, Lag= 0.0 min
Primary = 2.09 cfs @ 12.07 hrs, Volume= 0.123 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,759.81' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,759.15'	**18.0" Round Culvert** L= 55.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,759.15' / 1,749.00' S= 0.1845 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.04 cfs @ 12.07 hrs HW=1,759.80' (Free Discharge)
1=Culvert (Inlet Controls 2.04 cfs @ 2.75 fps)

Summary for Pond 37+72:

Inflow Area = 0.931 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.10 cfs @ 12.07 hrs, Volume= 0.064 af
Outflow = 1.10 cfs @ 12.07 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min
Primary = 1.10 cfs @ 12.07 hrs, Volume= 0.064 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.75' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.25'	**15.0" Round Culvert** L= 48.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.25' / 1,744.00' S= 0.1094 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.07 cfs @ 12.07 hrs HW=1,749.74' (Free Discharge)
1=Culvert (Inlet Controls 1.07 cfs @ 2.39 fps)

Summary for Pond 38+77:

Inflow Area = 2.023 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.30 cfs @ 12.06 hrs, Volume= 0.132 af
Outflow = 2.30 cfs @ 12.06 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.0 min
Primary = 2.30 cfs @ 12.06 hrs, Volume= 0.132 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,736.70' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,736.00'	**18.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,736.00' / 1,711.00' S= 0.3125 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.25 cfs @ 12.06 hrs HW=1,736.69' (Free Discharge)
1=Culvert (Inlet Controls 2.25 cfs @ 2.83 fps)

Summary for Pond 40+45:

Inflow Area = 2.494 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 3.03 cfs @ 12.06 hrs, Volume= 0.172 af
Outflow = 3.03 cfs @ 12.06 hrs, Volume= 0.172 af, Atten= 0%, Lag= 0.0 min
Primary = 3.03 cfs @ 12.06 hrs, Volume= 0.172 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,719.73' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,719.00'	**24.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,719.00' / 1,704.50' S= 0.1812 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=2.97 cfs @ 12.06 hrs HW=1,719.72' (Free Discharge)
1=Culvert (Inlet Controls 2.97 cfs @ 2.90 fps)

Summary for Pond 41+25:

Inflow Area = 2.492 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.64 cfs @ 12.09 hrs, Volume= 0.162 af
Outflow = 2.64 cfs @ 12.09 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min
Primary = 2.64 cfs @ 12.09 hrs, Volume= 0.162 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,719.26' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,718.50'	**18.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,718.50' / 1,696.50' S= 0.2750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.60 cfs @ 12.09 hrs HW=1,719.25' (Free Discharge)
1=Culvert (Inlet Controls 2.60 cfs @ 2.95 fps)

Summary for Pond 43+08:

Inflow Area = 2.496 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.47 cfs @ 12.11 hrs, Volume= 0.162 af
Outflow = 2.47 cfs @ 12.11 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.0 min
Primary = 2.47 cfs @ 12.11 hrs, Volume= 0.162 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,726.48' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,725.75'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,725.75' / 1,724.00' S= 0.0437 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.44 cfs @ 12.11 hrs HW=1,726.47' (Free Discharge)
1=Culvert (Inlet Controls 2.44 cfs @ 2.89 fps)

Summary for Pond 44+45:

Inflow Area = 3.305 ac, 0.00% Impervious, Inflow Depth > 0.62" for 2-yr event
Inflow = 1.61 cfs @ 12.13 hrs, Volume= 0.170 af
Outflow = 1.61 cfs @ 12.13 hrs, Volume= 0.170 af, Atten= 0%, Lag= 0.0 min
Primary = 1.61 cfs @ 12.13 hrs, Volume= 0.170 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,737.46' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,736.85'	**18.0" Round Culvert** L= 35.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,736.85' / 1,736.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.60 cfs @ 12.13 hrs HW=1,737.45' (Free Discharge)
1=Culvert (Barrel Controls 1.60 cfs @ 3.55 fps)

Summary for Pond 45+03:

Inflow Area = 2.435 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.99 cfs @ 12.04 hrs, Volume= 0.159 af
Outflow = 2.99 cfs @ 12.04 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min
Primary = 2.99 cfs @ 12.04 hrs, Volume= 0.159 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,741.24' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,740.50'	**24.0" Round Culvert** L= 42.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,740.50' / 1,740.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=2.93 cfs @ 12.04 hrs HW=1,741.23' (Free Discharge)
1=Culvert (Barrel Controls 2.93 cfs @ 4.22 fps)

Summary for Pond 46+45:

Inflow Area = 2.501 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.96 cfs @ 12.05 hrs, Volume= 0.163 af
Outflow = 2.96 cfs @ 12.05 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.0 min
Primary = 2.96 cfs @ 12.05 hrs, Volume= 0.163 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.72' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**24.0" Round Culvert** L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,743.00' S= 0.1111 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=2.95 cfs @ 12.05 hrs HW=1,748.72' (Free Discharge)
1=Culvert (Inlet Controls 2.95 cfs @ 2.89 fps)

Summary for Pond 50+90: Stream Crossing

Inflow Area = 14.796 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 14.64 cfs @ 12.11 hrs, Volume= 0.961 af
Outflow = 14.64 cfs @ 12.11 hrs, Volume= 0.961 af, Atten= 0%, Lag= 0.0 min
Primary = 14.64 cfs @ 12.11 hrs, Volume= 0.961 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,737.75' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,737.00'	**84.0" Round Culvert w/ 42.0" inside fill** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,733.50' / 1,714.00' S= 0.2437 '/' Cc= 0.900 n= 0.013, Flow Area= 19.24 sf

Primary OutFlow Max=14.43 cfs @ 12.11 hrs HW=1,737.75' (Free Discharge)
1=Culvert (Inlet Controls 14.43 cfs @ 2.78 fps)

Summary for Pond 56+97: 8' Box Stream Crossing

Inflow Area = 23.084 ac, 0.00% Impervious, Inflow Depth > 0.48" for 2-yr event
Inflow = 10.37 cfs @ 12.21 hrs, Volume= 0.929 af
Outflow = 10.37 cfs @ 12.21 hrs, Volume= 0.929 af, Atten= 0%, Lag= 0.0 min
Primary = 10.37 cfs @ 12.21 hrs, Volume= 0.929 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,730.59' @ 12.21 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,730.00'	**96.0" W x 54.0" H Box Culvert** L= 75.0' Box, 0° wingwalls, square crown edge, Ke= 0.700 Inlet / Outlet Invert= 1,730.00' / 1,725.00' S= 0.0667 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 36.00 sf

Primary OutFlow Max=10.29 cfs @ 12.21 hrs HW=1,730.59' (Free Discharge)
1=Culvert (Inlet Controls 10.29 cfs @ 2.18 fps)

Summary for Pond 58+85:

Inflow Area = 3.030 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.74 cfs @ 12.15 hrs, Volume= 0.196 af
Outflow = 2.74 cfs @ 12.15 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min
Primary = 2.74 cfs @ 12.15 hrs, Volume= 0.196 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,742.94' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,742.25'	**24.0" Round Culvert** L= 42.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,742.25' / 1,740.50' S= 0.0417 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=2.73 cfs @ 12.15 hrs HW=1,742.94' (Free Discharge)
1=Culvert (Inlet Controls 2.73 cfs @ 2.83 fps)

Summary for Pond 61+00:

Inflow Area = 2.329 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 2.24 cfs @ 12.12 hrs, Volume= 0.151 af
Outflow = 2.24 cfs @ 12.12 hrs, Volume= 0.151 af, Atten= 0%, Lag= 0.0 min
Primary = 2.24 cfs @ 12.12 hrs, Volume= 0.151 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,772.19' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,771.50'	**18.0" Round Culvert** L= 46.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,771.50' / 1,764.50' S= 0.1522 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.21 cfs @ 12.12 hrs HW=1,772.18' (Free Discharge)
1=Culvert (Inlet Controls 2.21 cfs @ 2.81 fps)

Summary for Pond 62+95:

Inflow Area = 1.536 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.52 cfs @ 12.13 hrs, Volume= 0.106 af
Outflow = 1.52 cfs @ 12.13 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min
Primary = 1.52 cfs @ 12.13 hrs, Volume= 0.106 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,799.60' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,799.00'	**15.0" Round Culvert** L= 61.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,799.00' / 1,788.00' S= 0.1803 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.50 cfs @ 12.13 hrs HW=1,799.59' (Free Discharge)
1=Culvert (Inlet Controls 1.50 cfs @ 2.62 fps)

Summary for Pond 64+57:

Inflow Area = 3.965 ac, 0.00% Impervious, Inflow Depth > 0.82" for 2-yr event
Inflow = 2.37 cfs @ 12.41 hrs, Volume= 0.270 af
Outflow = 2.37 cfs @ 12.41 hrs, Volume= 0.270 af, Atten= 0%, Lag= 0.0 min
Primary = 2.37 cfs @ 12.41 hrs, Volume= 0.270 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,823.46' @ 12.41 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,822.75'	**18.0" Round Culvert** L= 47.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,822.75' / 1,819.25' S= 0.0745 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.36 cfs @ 12.41 hrs HW=1,823.46' (Free Discharge)
1=Culvert (Inlet Controls 2.36 cfs @ 2.87 fps)

Summary for Pond 68+70:

Inflow Area = 3.348 ac, 0.00% Impervious, Inflow Depth > 0.82" for 2-yr event
Inflow = 2.29 cfs @ 12.32 hrs, Volume= 0.229 af
Outflow = 2.29 cfs @ 12.32 hrs, Volume= 0.229 af, Atten= 0%, Lag= 0.0 min
Primary = 2.29 cfs @ 12.32 hrs, Volume= 0.229 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,881.95' @ 12.32 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,881.25'	**18.0" Round Culvert** L= 36.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,881.25' / 1,880.00' S= 0.0347 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.28 cfs @ 12.32 hrs HW=1,881.95' (Free Discharge)
1=Culvert (Inlet Controls 2.28 cfs @ 2.84 fps)

Summary for Pond 72+75:

Inflow Area = 1.963 ac, 0.00% Impervious, Inflow Depth > 0.82" for 2-yr event
Inflow = 1.48 cfs @ 12.26 hrs, Volume= 0.135 af
Outflow = 1.48 cfs @ 12.26 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min
Primary = 1.48 cfs @ 12.26 hrs, Volume= 0.135 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,933.59' @ 12.26 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,933.00'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,933.00' / 1,912.00' S= 0.5250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.47 cfs @ 12.26 hrs HW=1,933.59' (Free Discharge)
1=Culvert (Inlet Controls 1.47 cfs @ 2.61 fps)

Summary for Pond 74+90:

Inflow Area = 5.127 ac, 0.00% Impervious, Inflow Depth > 0.90" for 2-yr event
Inflow = 3.59 cfs @ 12.43 hrs, Volume= 0.384 af
Outflow = 3.59 cfs @ 12.43 hrs, Volume= 0.384 af, Atten= 0%, Lag= 0.0 min
Primary = 3.59 cfs @ 12.43 hrs, Volume= 0.384 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,949.55' @ 12.43 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,948.75'	**24.0" Round Culvert** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,948.75' / 1,943.00' S= 0.0821 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=3.57 cfs @ 12.43 hrs HW=1,949.55' (Free Discharge)
1=Culvert (Inlet Controls 3.57 cfs @ 3.04 fps)

Summary for Pond 76+10:

Inflow Area = 1.637 ac, 0.00% Impervious, Inflow Depth > 1.10" for 2-yr event
Inflow = 1.60 cfs @ 12.28 hrs, Volume= 0.149 af
Outflow = 1.60 cfs @ 12.28 hrs, Volume= 0.149 af, Atten= 0%, Lag= 0.0 min
Primary = 1.60 cfs @ 12.28 hrs, Volume= 0.149 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,950.37' @ 12.28 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,949.75'	**15.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,949.75' / 1,949.00' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.60 cfs @ 12.28 hrs HW=1,950.36' (Free Discharge)
1=Culvert (Barrel Controls 1.60 cfs @ 3.89 fps)

Summary for Pond 115+42:

Inflow Area = 2.795 ac, 0.00% Impervious, Inflow Depth > 0.87" for 2-yr event
Inflow = 2.77 cfs @ 12.16 hrs, Volume= 0.204 af
Outflow = 2.77 cfs @ 12.16 hrs, Volume= 0.204 af, Atten= 0%, Lag= 0.0 min
Primary = 2.77 cfs @ 12.16 hrs, Volume= 0.204 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,001.70' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,001.00'	**24.0" Round Culvert** L= 55.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,001.00' / 1,998.50' S= 0.0455 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=2.74 cfs @ 12.16 hrs HW=2,001.69' (Free Discharge)
1=Culvert (Inlet Controls 2.74 cfs @ 2.84 fps)

Summary for Pond 122+38:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 0.88" for 2-yr event
Inflow = 2.22 cfs @ 12.09 hrs, Volume= 0.138 af
Outflow = 2.22 cfs @ 12.09 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min
Primary = 2.22 cfs @ 12.09 hrs, Volume= 0.138 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,044.69' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,044.00'	**18.0" Round Culvert** L= 65.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,044.00' / 2,043.25' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.20 cfs @ 12.09 hrs HW=2,044.68' (Free Discharge)
1=Culvert (Inlet Controls 2.20 cfs @ 2.81 fps)

Summary for Pond 171+50:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 0.78" for 2-yr event
Inflow = 1.42 cfs @ 12.19 hrs, Volume= 0.113 af
Outflow = 1.42 cfs @ 12.19 hrs, Volume= 0.113 af, Atten= 0%, Lag= 0.0 min
Primary = 1.42 cfs @ 12.19 hrs, Volume= 0.113 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 0.59' @ 12.19 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 0.00' / -0.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.41 cfs @ 12.19 hrs HW=0.59' (Free Discharge)
1=Culvert (Barrel Controls 1.41 cfs @ 3.65 fps)

Summary for Pond 181+30:

Inflow Area = 1.786 ac, 0.00% Impervious, Inflow Depth > 0.48" for 2-yr event
Inflow = 0.81 cfs @ 12.21 hrs, Volume= 0.072 af
Outflow = 0.81 cfs @ 12.21 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min
Primary = 0.81 cfs @ 12.21 hrs, Volume= 0.072 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 0.43' @ 12.21 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 0.00' / -0.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.80 cfs @ 12.21 hrs HW=0.43' (Free Discharge)
1=Culvert (Barrel Controls 0.80 cfs @ 3.21 fps)

Summary for Pond 200+80:

Inflow Area = 2.919 ac, 0.00% Impervious, Inflow Depth > 0.94" for 2-yr event
Inflow = 3.13 cfs @ 12.10 hrs, Volume= 0.229 af
Outflow = 3.13 cfs @ 12.10 hrs, Volume= 0.229 af, Atten= 0%, Lag= 0.0 min
Primary = 3.13 cfs @ 12.10 hrs, Volume= 0.229 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,032.74' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,032.00'	**24.0" Round Culvert** L= 85.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,032.00' / 2,016.00' S= 0.1882 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=3.12 cfs @ 12.10 hrs HW=2,032.74' (Free Discharge)
1=Culvert (Inlet Controls 3.12 cfs @ 2.94 fps)

Summary for Pond 205+56:

Inflow Area = 1.355 ac, 0.00% Impervious, Inflow Depth > 1.05" for 2-yr event
Inflow = 2.27 cfs @ 12.03 hrs, Volume= 0.118 af
Outflow = 2.27 cfs @ 12.03 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min
Primary = 2.27 cfs @ 12.03 hrs, Volume= 0.118 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,088.69' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,088.00'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,088.00' / 2,072.00' S= 0.2133 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.21 cfs @ 12.03 hrs HW=2,088.68' (Free Discharge)
1=Culvert (Inlet Controls 2.21 cfs @ 2.82 fps)

Summary for Pond 301+27:

Inflow Area = 1.601 ac, 0.00% Impervious, Inflow Depth > 0.82" for 2-yr event
Inflow = 1.16 cfs @ 12.28 hrs, Volume= 0.110 af
Outflow = 1.16 cfs @ 12.28 hrs, Volume= 0.110 af, Atten= 0%, Lag= 0.0 min
Primary = 1.16 cfs @ 12.28 hrs, Volume= 0.110 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,062.51' @ 12.28 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,062.00'	**15.0" Round Culvert** L= 100.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,062.00' / 2,056.50' S= 0.0550 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.15 cfs @ 12.28 hrs HW=2,062.51' (Free Discharge)
1=Culvert (Inlet Controls 1.15 cfs @ 2.44 fps)

Summary for Pond 303+10:

Inflow Area = 2.092 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.99 cfs @ 12.15 hrs, Volume= 0.144 af
Outflow = 1.99 cfs @ 12.15 hrs, Volume= 0.144 af, Atten= 0%, Lag= 0.0 min
Primary = 1.99 cfs @ 12.15 hrs, Volume= 0.144 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,050.16' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,049.50'	**18.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,049.50' / 2,049.00' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.98 cfs @ 12.15 hrs HW=2,050.16' (Free Discharge)
1=Culvert (Barrel Controls 1.98 cfs @ 3.87 fps)

Summary for Pond 304+15:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 0.83" for 2-yr event
Inflow = 1.39 cfs @ 12.15 hrs, Volume= 0.100 af
Outflow = 1.39 cfs @ 12.15 hrs, Volume= 0.100 af, Atten= 0%, Lag= 0.0 min
Primary = 1.39 cfs @ 12.15 hrs, Volume= 0.100 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,049.07' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,048.50'	**15.0" Round Culvert** L= 72.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,048.50' / 2,046.00' S= 0.0347 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.39 cfs @ 12.15 hrs HW=2,049.07' (Free Discharge)
1=Culvert (Inlet Controls 1.39 cfs @ 2.56 fps)

Summary for Subcatchment WS 10+30:

Runoff = 1.75 cfs @ 12.04 hrs, Volume= 0.094 af, Depth> 1.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
25,637	77	Woods, Good, HSG D
2,707	96	Gravel surface, HSG C
28,344	79	Weighted Average
28,344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	150	0.2530	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.1	16	0.2530	2.51		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	166	Total			

Summary for Subcatchment WS 115+42:

Runoff = 2.98 cfs @ 12.12 hrs, Volume= 0.201 af, Depth> 1.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
47,988	77	Woods, Good, HSG D
10,460	96	Gravel surface, HSG C
58,448	80	Weighted Average
58,448		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0900	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.1	95	0.0800	1.41		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	204	0.1200	10.95	131.37	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
19.1	449	Total			

Summary for Subcatchment WS 12+40:

Runoff = 3.67 cfs @ 12.08 hrs, Volume= 0.223 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
68,060	77	Woods, Good, HSG D
2,605	96	Gravel surface, HSG C
70,665	78	Weighted Average
70,665		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	150	0.3670	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.1	775	0.2600	2.55		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	165	0.0060	5.55	88.78	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
15.7	1,090	Total			

Summary for Subcatchment WS 122+38:

Runoff = 4.40 cfs @ 12.09 hrs, Volume= 0.271 af, Depth> 1.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
73,140	77	Woods, Good, HSG D
8,888	96	Gravel surface, HSG C
82,028	79	Weighted Average
82,028		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.4	150	0.1500	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.1	173	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	167	0.0350	5.91	70.95	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
16.0	490	Total			

Summary for Subcatchment WS 14+35:

Runoff = 1.74 cfs @ 12.02 hrs, Volume= 0.089 af, Depth> 1.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
24,639	77	Woods, Good, HSG D
2,186	96	Gravel surface, HSG C
26,825	79	Weighted Average
26,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	150	0.3800	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.3	128	0.0080	6.41	102.52	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
10.3	278	Total			

Summary for Subcatchment WS 16+82:

Runoff = 15.76 cfs @ 12.14 hrs, Volume= 1.101 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
359,886	77	Woods, Good, HSG D
4,733	96	Gravel surface, HSG C
364,619	77	Weighted Average
364,619		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	150	0.1430	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.6	880	0.2700	2.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.3	1,030	Total			

Summary for Subcatchment WS 171+50:

Runoff = 2.97 cfs @ 12.18 hrs, Volume= 0.230 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
26,096	71	Meadow, non-grazed, HSG C
22,966	70	Woods, Good, HSG C
10,307	74	>75% Grass cover, Good, HSG C
16,726	96	Gravel surface, HSG C
76,095	77	Weighted Average
76,095		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.4	100	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	368	0.0300	7.39	88.72	**Channel Flow, ditch** Area= 12.0 sf Perim= 15.0' r= 0.80' n= 0.030 Earth, grassed & winding
24.0	618	Total			

Summary for Subcatchment WS 18+55:

Runoff = 5.62 cfs @ 12.07 hrs, Volume= 0.333 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
107,750	77	Woods, Good, HSG D
2,340	96	Gravel surface, HSG C
110,090	77	Weighted Average
110,090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.4	835	0.4000	3.16		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	155	0.0190	9.90	118.80	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
14.9	1,140	Total			

Summary for Subcatchment WS 181+30:

Runoff = 2.14 cfs @ 12.18 hrs, Volume= 0.168 af, Depth> 1.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
77,785	70	Woods, Good, HSG C
77,785		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.7	50	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
2.0	363	0.0050	3.02	36.22	**Channel Flow, ditch** Area= 12.0 sf Perim= 15.0' r= 0.80' n= 0.030 Earth, grassed & winding
23.5	563	Total			

Summary for Subcatchment WS 2+05:

Runoff = 12.65 cfs @ 12.16 hrs, Volume= 0.943 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

	Area (sf)	CN	Description
	300,915	77	Woods, Good, HSG D
*	9,945	61	Treatment Swale
	1,496	96	Gravel surface, HSG C
	312,356	77	Weighted Average
	312,356		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	150	0.1670	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
8.9	930	0.1200	1.73		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.7	1,080	Total			

Summary for Subcatchment WS 20+50:

Runoff = 4.05 cfs @ 12.07 hrs, Volume= 0.240 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
77,556	77	Woods, Good, HSG D
1,800	96	Gravel surface, HSG C
79,356	77	Weighted Average
79,356		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.4	835	0.4000	3.16		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	155	0.0190	9.90	118.80	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
14.9	1,140	Total			

Summary for Subcatchment WS 200+80:

Runoff = 2.72 cfs @ 12.04 hrs, Volume= 0.151 af, Depth> 2.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
21,222	77	Woods, Good, HSG D
14,796	96	Gravel surface, HSG C
36,018	85	Weighted Average
36,018		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	117	0.1300	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"

Summary for Subcatchment WS 205+56:

Runoff = 4.20 cfs @ 12.03 hrs, Volume= 0.221 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
42,737	77	Woods, Good, HSG D
16,287	96	Gravel surface, HSG C
59,024	82	Weighted Average
59,024		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.0	159	0.3300	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"

Summary for Subcatchment WS 22+00:

Runoff = 5.74 cfs @ 12.11 hrs, Volume= 0.372 af, Depth> 1.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
169,921	70	Woods, Good, HSG C
1,440	96	Gravel surface, HSG C
171,361	70	Weighted Average
171,361		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.5	910	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	96	0.0300	12.44	149.28	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.0	1,156	Total			

Summary for Subcatchment WS 23+25:

Runoff = 3.99 cfs @ 12.16 hrs, Volume= 0.291 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
95,376	77	Woods, Good, HSG D
1,080	96	Gravel surface, HSG C
96,456	77	Weighted Average
96,456		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.4	1,050	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	35	0.0150	8.80	105.56	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
21.9	1,235	Total			

Summary for Subcatchment WS 24+13:

Runoff = 4.66 cfs @ 12.16 hrs, Volume= 0.340 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
111,596	77	Woods, Good, HSG D
996	96	Gravel surface, HSG C
112,592	77	Weighted Average
112,592		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.4	1,050	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	35	0.0150	8.80	105.56	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
21.9	1,235	Total			

Summary for Subcatchment WS 25+06:

Runoff = 5.86 cfs @ 12.16 hrs, Volume= 0.435 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
133,112	77	Woods, Good, HSG D
4,838	96	Gravel surface, HSG C
137,950	78	Weighted Average
137,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	150	0.0930	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.9	820	0.3050	2.76		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	232	0.2700	21.19	381.45	**Trap/Vee/Rect Channel Flow,** Bot.W=3.00' D=2.00' Z= 3.0 '/' Top.W=15.00' n= 0.040 Mountain streams
22.6	1,202	Total			

Summary for Subcatchment WS 27+05:

Runoff = 5.98 cfs @ 12.08 hrs, Volume= 0.359 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
116,346	77	Woods, Good, HSG D
2,220	96	Gravel surface, HSG C
118,566	77	Weighted Average
118,566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	150	0.2800	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.8	640	0.3100	2.78		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	100	0.0620	17.88	214.60	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
15.2	890	Total			

Summary for Subcatchment WS 28+20:

Runoff = 3.54 cfs @ 12.05 hrs, Volume= 0.192 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
61,916	77	Woods, Good, HSG D
1,380	96	Gravel surface, HSG C
63,296	77	Weighted Average
63,296		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	365	0.3400	2.92		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
12.3	515	Total			

Summary for Subcatchment WS 30+00:

Runoff = 6.00 cfs @ 12.10 hrs, Volume= 0.382 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
124,161	77	Woods, Good, HSG D
2,160	96	Gravel surface, HSG C
126,321	77	Weighted Average
126,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.2500	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.3	908	0.3300	2.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.2	1,083	Total			

Summary for Subcatchment WS 30+45:

Runoff = 2.05 cfs @ 12.10 hrs, Volume= 0.131 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
40,042	77	Woods, Good, HSG D
1,320	96	Gravel surface, HSG C
41,362	78	Weighted Average
41,362		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.2500	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.3	908	0.3300	2.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.2	1,083	Total			

Summary for Subcatchment WS 301+27:

Runoff = 2.39 cfs @ 12.27 hrs, Volume= 0.219 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
64,421	77	Woods, Good, HSG D
5,319	96	Gravel surface, HSG C
69,740	78	Weighted Average
69,740		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.4	150	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
3.1	392	0.1800	2.12		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
31.5	542	Total			

Summary for Subcatchment WS 303+10:

Runoff = 4.05 cfs @ 12.14 hrs, Volume= 0.287 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
87,719	77	Woods, Good, HSG D
3,416	96	Gravel surface, HSG C
91,135	78	Weighted Average
91,135		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.6	150	0.0800	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	299	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	82	0.0300	5.47	65.68	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
20.9	531	Total			

Summary for Subcatchment WS 304+15:

Runoff = 2.83 cfs @ 12.14 hrs, Volume= 0.200 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
59,287	77	Woods, Good, HSG D
4,009	96	Gravel surface, HSG C
63,296	78	Weighted Average
63,296		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.6	150	0.0800	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	299	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.7	449	Total			

Summary for Subcatchment WS 31+15:

Runoff = 6.74 cfs @ 12.11 hrs, Volume= 0.435 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
143,160	77	Woods, Good, HSG D
840	96	Gravel surface, HSG C
144,000	77	Weighted Average
144,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	150	0.2630	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.1	1,000	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.7	1,175	Total			

Summary for Subcatchment WS 31+85:

Runoff = 2.28 cfs @ 12.11 hrs, Volume= 0.147 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
47,785	77	Woods, Good, HSG D
840	96	Gravel surface, HSG C
48,625	77	Weighted Average
48,625		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	150	0.2630	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.1	1,000	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.7	1,175	Total			

Summary for Subcatchment WS 32+50:

Runoff = 12.07 cfs @ 12.07 hrs, Volume= 0.701 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
228,024	77	Woods, Good, HSG D
3,636	96	Gravel surface, HSG C
0	70	Woods, Good, HSG C
231,660	77	Weighted Average
231,660		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.4200	0.26		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.6	825	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	190	0.0920	21.73	347.66	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
14.3	1,165	Total			

Summary for Subcatchment WS 36+55:

Runoff = 4.32 cfs @ 12.07 hrs, Volume= 0.250 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
81,253	77	Woods, Good, HSG D
1,416	96	Gravel surface, HSG C
0	70	Woods, Good, HSG C
82,669	77	Weighted Average
82,669		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.4200	0.26		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.6	825	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
14.2	975	Total			

Summary for Subcatchment WS 37+72:

Runoff = 2.22 cfs @ 12.07 hrs, Volume= 0.128 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
39,193	77	Woods, Good, HSG D
1,380	96	Gravel surface, HSG C
40,573	78	Weighted Average
40,573		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.3	150	0.3500	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.8	680	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	80	0.0900	21.49	343.86	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
14.2	910	Total			

Summary for Subcatchment WS 38+77:

Runoff = 4.74 cfs @ 12.06 hrs, Volume= 0.267 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
86,843	77	Woods, Good, HSG D
1,300	96	Gravel surface, HSG C
88,143	77	Weighted Average
88,143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	150	0.3270	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.7	610	0.5860	3.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	65	0.0230	10.89	130.71	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
13.4	825	Total			

Summary for Subcatchment WS 4+15:

Runoff = 3.50 cfs @ 12.09 hrs, Volume= 0.218 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
65,304	77	Woods, Good, HSG D
3,803	96	Gravel surface, HSG C
69,107	78	Weighted Average
69,107		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.2	130	0.1250	1.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.6	280	Total			

Summary for Subcatchment WS 40+45:

Runoff = 6.10 cfs @ 12.06 hrs, Volume= 0.344 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
105,775	77	Woods, Good, HSG D
2,868	96	Gravel surface, HSG C
108,643	78	Weighted Average
108,643		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	150	0.3270	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.7	610	0.5860	3.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	65	0.0230	10.89	130.71	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
13.4	825	Total			

Summary for Subcatchment WS 41+25:

Runoff = 5.46 cfs @ 12.08 hrs, Volume= 0.328 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
106,430	77	Woods, Good, HSG D
2,100	96	Gravel surface, HSG C
108,530	77	Weighted Average
108,530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	150	0.2100	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	565	0.5500	3.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	170	0.0650	18.31	219.73	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
15.3	885	Total			

Summary for Subcatchment WS 43+08:

Runoff = 5.14 cfs @ 12.10 hrs, Volume= 0.329 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
107,045	77	Woods, Good, HSG D
1,680	96	Gravel surface, HSG C
108,725	77	Weighted Average
108,725		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	575	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	95	0.0800	20.31	243.77	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.4	820	Total			

Summary for Subcatchment WS 44+45:

Runoff = 3.13 cfs @ 12.10 hrs, Volume= 0.200 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
65,569	77	Woods, Good, HSG D
600	96	Gravel surface, HSG C
66,169	77	Weighted Average
66,169		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	575	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	95	0.0800	20.31	243.77	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.4	820	Total			

Summary for Subcatchment WS 45+03:

Runoff = 6.12 cfs @ 12.04 hrs, Volume= 0.322 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
104,320	77	Woods, Good, HSG D
1,765	96	Gravel surface, HSG C
106,085	77	Weighted Average
106,085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	150	0.5700	0.30		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.6	565	0.5100	3.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	150	0.0430	14.89	178.72	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
11.3	865	Total			

Summary for Subcatchment WS 46+45:

Runoff = 6.09 cfs @ 12.05 hrs, Volume= 0.330 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
106,776	77	Woods, Good, HSG D
2,170	96	Gravel surface, HSG C
108,946	77	Weighted Average
108,946		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	150	0.4800	0.28		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.1	630	0.4700	3.43		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	30	0.0430	6.55	78.64	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
12.3	810	Total			

Summary for Subcatchment WS 5+82:

Runoff = 3.03 cfs @ 12.11 hrs, Volume= 0.198 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
60,296	77	Woods, Good, HSG D
2,284	96	Gravel surface, HSG C
62,580	78	Weighted Average
62,580		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	150	0.1430	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.3	504	0.2560	2.53		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.0	654	Total			

Summary for Subcatchment WS 50+90:

Runoff = 30.45 cfs @ 12.10 hrs, Volume= 1.949 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
13,719	77	Woods, Good, HSG D
7,857	96	Gravel surface, HSG C
622,955	77	Woods, Good, HSG D
644,531	77	Weighted Average
644,531		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	150	0.3800	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
7.4	1,168	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
17.4	1,318	Total			

Summary for Subcatchment WS 56+97:

Runoff = 27.39 cfs @ 12.19 hrs, Volume= 2.174 af, Depth> 1.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
15,978	77	Woods, Good, HSG D
5,437	96	Gravel surface, HSG C
984,105	70	Woods, Good, HSG C
1,005,520	70	Weighted Average
1,005,520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.8	150	0.2030	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
10.6	1,473	0.2150	2.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	260	0.0730	11.88	285.01	**Trap/Vee/Rect Channel Flow,** Bot.W=6.00' D=2.00' Z= 3.0 '/' Top.W=18.00' n= 0.040 Mountain streams
23.8	1,883	Total			

Summary for Subcatchment WS 58+85:

Runoff = 5.72 cfs @ 12.14 hrs, Volume= 0.399 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
129,392	77	Woods, Good, HSG D
2,580	96	Gravel surface, HSG C
131,972	77	Weighted Average
131,972		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
8.8	1,287	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.2	1,437	Total			

Summary for Subcatchment WS 61+00:

Runoff = 4.67 cfs @ 12.11 hrs, Volume= 0.307 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
99,071	77	Woods, Good, HSG D
2,400	96	Gravel surface, HSG C
101,471	77	Weighted Average
101,471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.8	1,000	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.2	1,150	Total			

Summary for Subcatchment WS 62+95:

Runoff = 3.11 cfs @ 12.12 hrs, Volume= 0.211 af, Depth> 1.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
64,988	77	Woods, Good, HSG D
1,920	96	Gravel surface, HSG C
66,908	78	Weighted Average
66,908		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	150	0.1800	0.19		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.0	960	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
19.4	1,110	Total			

Summary for Subcatchment WS 64+57:

Runoff = 4.91 cfs @ 12.40 hrs, Volume= 0.540 af, Depth> 1.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
167,760	77	Woods, Good, HSG D
4,944	96	Gravel surface, HSG C
172,704	78	Weighted Average
172,704		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
38.8	130	0.0100	0.06		**Sheet Flow,** Grass: Bermuda n= 0.410 P2= 2.70"
2.2	430	0.4100	3.20		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	331	0.1500	12.24	146.87	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
41.5	891	Total			

Summary for Subcatchment WS 68+70:

Runoff = 4.73 cfs @ 12.30 hrs, Volume= 0.458 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
141,041	77	Woods, Good, HSG D
4,800	96	Gravel surface, HSG C
145,841	78	Weighted Average
145,841		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.7	120	0.0100	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
5.4	30	0.0700	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.2	332	0.0450	1.06		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.0	28	0.1400	11.82	141.89	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
34.3	510	Total			

Summary for Subcatchment WS 7+26:

Runoff = 13.92 cfs @ 12.12 hrs, Volume= 0.922 af, Depth> 1.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
303,561	77	Woods, Good, HSG D
1,339	96	Gravel surface, HSG C
304,900	77	Weighted Average
304,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.7	538	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.5	688	Total			

Summary for Subcatchment WS 72+75:

Runoff = 3.05 cfs @ 12.25 hrs, Volume= 0.269 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
82,987	77	Woods, Good, HSG D
2,520	96	Gravel surface, HSG C
85,507	78	Weighted Average
85,507		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	125	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
2.1	25	0.5000	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.2	444	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.0	12	0.1700	13.03	156.36	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
29.8	606	Total			

Summary for Subcatchment WS 74+90:

Runoff = 5.13 cfs @ 12.29 hrs, Volume= 0.483 af, Depth> 1.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
121,052	77	Woods, Good, HSG D
20,255	96	Gravel surface, HSG C
141,307	80	Weighted Average
141,307		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	135	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
1.4	15	0.5000	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.6	624	0.1400	1.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
33.1	774	Total			

Summary for Subcatchment WS 76+10:

Runoff = 2.97 cfs @ 12.27 hrs, Volume= 0.275 af, Depth> 2.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.90"

Area (sf)	CN	Description
49,875	77	Woods, Good, HSG D
21,418	96	Gravel surface, HSG C
71,293	83	Weighted Average
71,293		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.4	150	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.1	25	0.5000	4.95		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.7	245	0.0490	1.11		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
32.2	420	Total			

Summary for Reach 1R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 2.97 cfs @ 12.18 hrs, Volume= 0.230 af
Outflow = 2.72 cfs @ 12.37 hrs, Volume= 0.226 af, Atten= 9%, Lag= 11.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.37 fps, Min. Travel Time= 6.8 min
Avg. Velocity = 0.12 fps, Avg. Travel Time= 20.9 min

Peak Storage= 1,110 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.14'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 22.44 cfs

50.00' x 0.50' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 150.0' Slope= 0.1367 '/'
Inlet Invert= 2,085.00', Outlet Invert= 2,064.50'

Summary for Reach 2R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 1.55" for 10-yr event
Inflow = 2.72 cfs @ 12.37 hrs, Volume= 0.226 af
Outflow = 2.17 cfs @ 12.73 hrs, Volume= 0.219 af, Atten= 20%, Lag= 21.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.01 fps, Min. Travel Time= 12.9 min
Avg. Velocity = 0.39 fps, Avg. Travel Time= 33.9 min

Peak Storage= 1,695 cf @ 12.51 hrs
Average Depth at Peak Storage= 0.04'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 135.64 cfs

50.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 785.0' Slope= 0.3121 '/'
Inlet Invert= 2,064.50', Outlet Invert= 1,819.50'

Summary for Reach 3R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 1.51" for 10-yr event
Inflow = 2.17 cfs @ 12.73 hrs, Volume= 0.219 af
Outflow = 2.16 cfs @ 12.75 hrs, Volume= 0.219 af, Atten= 0%, Lag= 1.6 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.69 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 1.97 fps, Avg. Travel Time= 2.0 min

Peak Storage= 107 cf @ 12.74 hrs
Average Depth at Peak Storage= 0.14'
Bank-Full Depth= 2.00' Flow Area= 18.0 sf, Capacity= 381.02 cfs

3.00' x 2.00' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 3.0 '/' Top Width= 15.00'
Length= 232.0' Slope= 0.2694 '/'
Inlet Invert= 1,819.50', Outlet Invert= 1,757.00'

‡

Summary for Reach 4R:

Inflow Area = 2.092 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 4.05 cfs @ 12.14 hrs, Volume= 0.287 af
Outflow = 4.03 cfs @ 12.16 hrs, Volume= 0.287 af, Atten= 1%, Lag= 0.8 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.28 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.51 fps, Avg. Travel Time= 1.3 min

Peak Storage= 109 cf @ 12.15 hrs
Average Depth at Peak Storage= 0.35'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 132.31 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 115.0' Slope= 0.1217 '/'
Inlet Invert= 2,046.00', Outlet Invert= 2,032.00'

Summary for Reach 5R:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 2.83 cfs @ 12.14 hrs, Volume= 0.200 af
Outflow = 2.77 cfs @ 12.19 hrs, Volume= 0.199 af, Atten= 2%, Lag= 2.8 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.81 fps, Min. Travel Time= 1.6 min
Avg. Velocity = 1.34 fps, Avg. Travel Time= 4.5 min

Peak Storage= 269 cf @ 12.16 hrs
Average Depth at Peak Storage= 0.29'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 131.67 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 365.0' Slope= 0.1205 '/'
Inlet Invert= 2,045.00', Outlet Invert= 2,001.00'

Summary for Reach 7R:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 1.72" for 10-yr event
Inflow = 4.40 cfs @ 12.09 hrs, Volume= 0.271 af
Outflow = 3.42 cfs @ 12.36 hrs, Volume= 0.264 af, Atten= 22%, Lag= 16.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.87 fps, Min. Travel Time= 10.5 min
Avg. Velocity = 0.29 fps, Avg. Travel Time= 31.2 min

Peak Storage= 2,173 cf @ 12.18 hrs
Average Depth at Peak Storage= 0.08'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 261.57 cfs

50.00' x 1.00' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 550.0' Slope= 0.1059 '/'
Inlet Invert= 2,043.25', Outlet Invert= 1,985.00'

Summary for Reach 44R:

Inflow Area = 1.786 ac, 0.00% Impervious, Inflow Depth > 1.13" for 10-yr event
Inflow = 2.14 cfs @ 12.18 hrs, Volume= 0.168 af
Outflow = 2.03 cfs @ 12.31 hrs, Volume= 0.167 af, Atten= 5%, Lag= 7.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.72 fps, Min. Travel Time= 4.2 min
Avg. Velocity = 1.40 fps, Avg. Travel Time= 8.1 min

Peak Storage= 512 cf @ 12.23 hrs
Average Depth at Peak Storage= 0.02'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 732.88 cfs

50.00' x 0.50' deep channel, n= 0.025 Earth, clean & winding
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 680.0' Slope= 0.5695 '/'
Inlet Invert= 2,113.50', Outlet Invert= 1,726.25'

Summary for Reach 123R:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 1.68" for 10-yr event
Inflow = 3.42 cfs @ 12.36 hrs, Volume= 0.264 af
Outflow = 3.36 cfs @ 12.39 hrs, Volume= 0.264 af, Atten= 2%, Lag= 1.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.22 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 1.53 fps, Avg. Travel Time= 2.8 min

Peak Storage= 210 cf @ 12.37 hrs
Average Depth at Peak Storage= 0.31'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 140.35 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 261.0' Slope= 0.1370 '/'
Inlet Invert= 1,985.00', Outlet Invert= 1,949.25'

Summary for Pond 2+02: Stream Crossing

Inflow Area = 7.171 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 12.65 cfs @ 12.16 hrs, Volume= 0.943 af
Outflow = 12.65 cfs @ 12.16 hrs, Volume= 0.943 af, Atten= 0%, Lag= 0.0 min
Primary = 12.65 cfs @ 12.16 hrs, Volume= 0.943 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,759.76' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,759.00'	**72.0" Round Culvert w/ 36.0" inside fill** L= 120.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,756.00' / 1,741.25' S= 0.1229 '/' Cc= 0.900 n= 0.013, Flow Area= 14.14 sf

Primary OutFlow Max=12.51 cfs @ 12.16 hrs HW=1,759.75' (Free Discharge)
↑**1=Culvert** (Inlet Controls 12.51 cfs @ 2.80 fps)

Summary for Pond 4+15:

Inflow Area = 1.586 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 3.50 cfs @ 12.09 hrs, Volume= 0.218 af
Outflow = 3.50 cfs @ 12.09 hrs, Volume= 0.218 af, Atten= 0%, Lag= 0.0 min
Primary = 3.50 cfs @ 12.09 hrs, Volume= 0.218 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.89' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**18.0" Round Culvert** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.00' / 1,746.50' S= 0.0643 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.47 cfs @ 12.09 hrs HW=1,751.88' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.47 cfs @ 3.20 fps)

Summary for Pond 5+82:

Inflow Area = 1.437 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 3.03 cfs @ 12.11 hrs, Volume= 0.198 af
Outflow = 3.03 cfs @ 12.11 hrs, Volume= 0.198 af, Atten= 0%, Lag= 0.0 min
Primary = 3.03 cfs @ 12.11 hrs, Volume= 0.198 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.32' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.50'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.50' / 1,749.00' S= 0.0375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.00 cfs @ 12.11 hrs HW=1,751.31' (Free Discharge)
1=Culvert (Inlet Controls 3.00 cfs @ 3.07 fps)

Summary for Pond 7+26: Stream Crossing

Inflow Area = 7.000 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 13.92 cfs @ 12.12 hrs, Volume= 0.922 af
Outflow = 13.92 cfs @ 12.12 hrs, Volume= 0.922 af, Atten= 0%, Lag= 0.0 min
Primary = 13.92 cfs @ 12.12 hrs, Volume= 0.922 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.08' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**48.0" Round Culvert w/ 24.0" inside fill** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.00' / 1,745.00' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 6.28 sf

Primary OutFlow Max=13.72 cfs @ 12.12 hrs HW=1,752.07' (Free Discharge)
↑**1=Culvert** (Inlet Controls 13.72 cfs @ 3.38 fps)

Summary for Pond 10+30:

Inflow Area = 0.651 ac, 0.00% Impervious, Inflow Depth > 1.73" for 10-yr event
Inflow = 1.75 cfs @ 12.04 hrs, Volume= 0.094 af
Outflow = 1.75 cfs @ 12.04 hrs, Volume= 0.094 af, Atten= 0%, Lag= 0.0 min
Primary = 1.75 cfs @ 12.04 hrs, Volume= 0.094 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.90' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.25'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.25' / 1,742.50' S= 0.1750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.72 cfs @ 12.04 hrs HW=1,751.89' (Free Discharge)
↑**1=Culvert** (Inlet Controls 1.72 cfs @ 2.72 fps)

Summary for Pond 12+40:

Inflow Area = 1.622 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 3.67 cfs @ 12.08 hrs, Volume= 0.223 af
Outflow = 3.67 cfs @ 12.08 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min
Primary = 3.67 cfs @ 12.08 hrs, Volume= 0.223 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,750.91' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.00'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.00' / 1,730.00' S= 0.2667 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.61 cfs @ 12.08 hrs HW=1,750.90' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.61 cfs @ 3.24 fps)

Summary for Pond 14+35:

Inflow Area = 0.616 ac, 0.00% Impervious, Inflow Depth > 1.73" for 10-yr event
Inflow = 1.74 cfs @ 12.02 hrs, Volume= 0.089 af
Outflow = 1.74 cfs @ 12.02 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.0 min
Primary = 1.74 cfs @ 12.02 hrs, Volume= 0.089 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.64' @ 12.02 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**15.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,728.00' S= 0.2667 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.69 cfs @ 12.02 hrs HW=1,748.63' (Free Discharge)
1=Culvert (Inlet Controls 1.69 cfs @ 2.71 fps)

Summary for Pond 16+82: Stream Crossing

Inflow Area = 8.371 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 15.76 cfs @ 12.14 hrs, Volume= 1.101 af
Outflow = 15.76 cfs @ 12.14 hrs, Volume= 1.101 af, Atten= 0%, Lag= 0.0 min
Primary = 15.76 cfs @ 12.14 hrs, Volume= 1.101 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,741.63' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,740.75'	**72.0" Round Culvert w/ 36.0" inside fill** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,737.75' / 1,734.00' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 14.14 sf

Primary OutFlow Max=15.59 cfs @ 12.14 hrs HW=1,741.62' (Free Discharge)
1=Culvert (Inlet Controls 15.59 cfs @ 3.02 fps)

Summary for Pond 18+55:

Inflow Area = 2.527 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 5.62 cfs @ 12.07 hrs, Volume= 0.333 af
Outflow = 5.62 cfs @ 12.07 hrs, Volume= 0.333 af, Atten= 0%, Lag= 0.0 min
Primary = 5.62 cfs @ 12.07 hrs, Volume= 0.333 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,744.69' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,743.50'	**18.0" Round Culvert** L= 58.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,743.50' / 1,732.00' S= 0.1983 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.50 cfs @ 12.07 hrs HW=1,744.68' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.50 cfs @ 3.70 fps)

Summary for Pond 20+50:

Inflow Area = 1.822 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 4.05 cfs @ 12.07 hrs, Volume= 0.240 af
Outflow = 4.05 cfs @ 12.07 hrs, Volume= 0.240 af, Atten= 0%, Lag= 0.0 min
Primary = 4.05 cfs @ 12.07 hrs, Volume= 0.240 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.22' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,747.25'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,747.25' / 1,744.50' S= 0.0688 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.97 cfs @ 12.07 hrs HW=1,748.21' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.97 cfs @ 3.33 fps)

Summary for Pond 22+00:

Inflow Area = 3.934 ac, 0.00% Impervious, Inflow Depth > 1.13" for 10-yr event
Inflow = 5.74 cfs @ 12.11 hrs, Volume= 0.372 af
Outflow = 5.74 cfs @ 12.11 hrs, Volume= 0.372 af, Atten= 0%, Lag= 0.0 min
Primary = 5.74 cfs @ 12.11 hrs, Volume= 0.372 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.21' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**18.0" Round Culvert** L= 60.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.00' / 1,739.00' S= 0.2000 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.69 cfs @ 12.11 hrs HW=1,752.21' (Free Discharge)
1=Culvert (Inlet Controls 5.69 cfs @ 3.74 fps)

Summary for Pond 23+25:

Inflow Area = 2.214 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 3.99 cfs @ 12.16 hrs, Volume= 0.291 af
Outflow = 3.99 cfs @ 12.16 hrs, Volume= 0.291 af, Atten= 0%, Lag= 0.0 min
Primary = 3.99 cfs @ 12.16 hrs, Volume= 0.291 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,755.21' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,754.25'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,754.25' / 1,735.50' S= 0.2500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.97 cfs @ 12.16 hrs HW=1,755.21' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.97 cfs @ 3.33 fps)

Summary for Pond 24+13:

Inflow Area = 2.585 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 4.66 cfs @ 12.16 hrs, Volume= 0.340 af
Outflow = 4.66 cfs @ 12.16 hrs, Volume= 0.340 af, Atten= 0%, Lag= 0.0 min
Primary = 4.66 cfs @ 12.16 hrs, Volume= 0.340 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,757.31' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,756.25'	**18.0" Round Culvert** L= 91.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,756.25' / 1,731.00' S= 0.2775 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.64 cfs @ 12.16 hrs HW=1,757.30' (Free Discharge)
1=Culvert (Inlet Controls 4.64 cfs @ 3.50 fps)

Summary for Pond 25+06: Stream Crossing

Inflow Area = 4.914 ac, 0.00% Impervious, Inflow Depth > 1.60" for 10-yr event
Inflow = 5.91 cfs @ 12.16 hrs, Volume= 0.654 af
Outflow = 5.91 cfs @ 12.16 hrs, Volume= 0.654 af, Atten= 0%, Lag= 0.0 min
Primary = 5.91 cfs @ 12.16 hrs, Volume= 0.654 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,757.51' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,757.00'	**60.0" Round Culvert w/ 30.0" inside fill** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,754.50' / 1,734.00' S= 0.2562 '/' Cc= 0.900 n= 0.013, Flow Area= 9.82 sf

Primary OutFlow Max=5.85 cfs @ 12.16 hrs HW=1,757.51' (Free Discharge)
1=Culvert (Inlet Controls 5.85 cfs @ 2.30 fps)

Summary for Pond 27+05:

Inflow Area = 2.722 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 5.98 cfs @ 12.08 hrs, Volume= 0.359 af
Outflow = 5.98 cfs @ 12.08 hrs, Volume= 0.359 af, Atten= 0%, Lag= 0.0 min
Primary = 5.98 cfs @ 12.08 hrs, Volume= 0.359 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.00' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.75'	**18.0" Round Culvert** L= 53.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.75' / 1,742.50' S= 0.1557 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.87 cfs @ 12.08 hrs HW=1,751.98' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.87 cfs @ 3.78 fps)

Summary for Pond 28+20:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 3.54 cfs @ 12.05 hrs, Volume= 0.192 af
Outflow = 3.54 cfs @ 12.05 hrs, Volume= 0.192 af, Atten= 0%, Lag= 0.0 min
Primary = 3.54 cfs @ 12.05 hrs, Volume= 0.192 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,750.30' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.25'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.25' / 1,748.85' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.51 cfs @ 12.05 hrs HW=1,750.30' (Free Discharge)
↑**1=Culvert** (Barrel Controls 3.51 cfs @ 4.32 fps)

Summary for Pond 30+00:

Inflow Area = 2.900 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 6.00 cfs @ 12.10 hrs, Volume= 0.382 af
Outflow = 6.00 cfs @ 12.10 hrs, Volume= 0.382 af, Atten= 0%, Lag= 0.0 min
Primary = 6.00 cfs @ 12.10 hrs, Volume= 0.382 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.32' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.25'	**24.0" Round Culvert** L= 60.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.25' / 1,741.00' S= 0.1208 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=5.99 cfs @ 12.10 hrs HW=1,749.32' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.99 cfs @ 3.52 fps)

Summary for Pond 30+45:

Inflow Area = 0.950 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 2.05 cfs @ 12.10 hrs, Volume= 0.131 af
Outflow = 2.05 cfs @ 12.10 hrs, Volume= 0.131 af, Atten= 0%, Lag= 0.0 min
Primary = 2.05 cfs @ 12.10 hrs, Volume= 0.131 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.96' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.25'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.25' / 1,746.50' S= 0.0437 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.05 cfs @ 12.10 hrs HW=1,748.96' (Free Discharge)
↑**1=Culvert** (Inlet Controls 2.05 cfs @ 2.86 fps)

Summary for Pond 31+15:

Inflow Area = 3.306 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 6.74 cfs @ 12.11 hrs, Volume= 0.435 af
Outflow = 6.74 cfs @ 12.11 hrs, Volume= 0.435 af, Atten= 0%, Lag= 0.0 min
Primary = 6.74 cfs @ 12.11 hrs, Volume= 0.435 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.14' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**24.0" Round Culvert** L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,744.50' S= 0.0778 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=6.68 cfs @ 12.11 hrs HW=1,749.14' (Free Discharge)
1=Culvert (Inlet Controls 6.68 cfs @ 3.63 fps)

Summary for Pond 31+85:

Inflow Area = 1.116 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 2.28 cfs @ 12.11 hrs, Volume= 0.147 af
Outflow = 2.28 cfs @ 12.11 hrs, Volume= 0.147 af, Atten= 0%, Lag= 0.0 min
Primary = 2.28 cfs @ 12.11 hrs, Volume= 0.147 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.55' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.75'	**15.0" Round Culvert** L= 35.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.75' / 1,748.40' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.26 cfs @ 12.11 hrs HW=1,749.55' (Free Discharge)
1=Culvert (Barrel Controls 2.26 cfs @ 3.88 fps)

Summary for Pond 32+50: Stream Crossing

Inflow Area = 5.318 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 12.07 cfs @ 12.07 hrs, Volume= 0.701 af
Outflow = 12.07 cfs @ 12.07 hrs, Volume= 0.701 af, Atten= 0%, Lag= 0.0 min
Primary = 12.07 cfs @ 12.07 hrs, Volume= 0.701 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.66' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.00'	**84.0" Round Culvert w/ 42.0" inside fill** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,745.50' / 1,729.50' S= 0.2286 '/' Cc= 0.900 n= 0.013, Flow Area= 19.24 sf

Primary OutFlow Max=11.80 cfs @ 12.07 hrs HW=1,749.65' (Free Discharge)
1=Culvert (Inlet Controls 11.80 cfs @ 2.60 fps)

Summary for Pond 36+55:

Inflow Area = 1.898 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 4.32 cfs @ 12.07 hrs, Volume= 0.250 af
Outflow = 4.32 cfs @ 12.07 hrs, Volume= 0.250 af, Atten= 0%, Lag= 0.0 min
Primary = 4.32 cfs @ 12.07 hrs, Volume= 0.250 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,760.16' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,759.15'	**18.0" Round Culvert** L= 55.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,759.15' / 1,749.00' S= 0.1845 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.24 cfs @ 12.07 hrs HW=1,760.15' (Free Discharge)
1=Culvert (Inlet Controls 4.24 cfs @ 3.40 fps)

Summary for Pond 37+72:

Inflow Area = 0.931 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 2.22 cfs @ 12.07 hrs, Volume= 0.128 af
Outflow = 2.22 cfs @ 12.07 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min
Primary = 2.22 cfs @ 12.07 hrs, Volume= 0.128 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.99' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.25'	**15.0" Round Culvert** L= 48.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.25' / 1,744.00' S= 0.1094 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.17 cfs @ 12.07 hrs HW=1,749.98' (Free Discharge)
1=Culvert (Inlet Controls 2.17 cfs @ 2.91 fps)

Summary for Pond 38+77:

Inflow Area = 2.023 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 4.74 cfs @ 12.06 hrs, Volume= 0.267 af
Outflow = 4.74 cfs @ 12.06 hrs, Volume= 0.267 af, Atten= 0%, Lag= 0.0 min
Primary = 4.74 cfs @ 12.06 hrs, Volume= 0.267 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,737.07' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,736.00'	**18.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,736.00' / 1,711.00' S= 0.3125 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.68 cfs @ 12.06 hrs HW=1,737.06' (Free Discharge)
1=Culvert (Inlet Controls 4.68 cfs @ 3.51 fps)

Summary for Pond 40+45:

Inflow Area = 2.494 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 6.10 cfs @ 12.06 hrs, Volume= 0.344 af
Outflow = 6.10 cfs @ 12.06 hrs, Volume= 0.344 af, Atten= 0%, Lag= 0.0 min
Primary = 6.10 cfs @ 12.06 hrs, Volume= 0.344 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,720.08' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,719.00'	**24.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,719.00' / 1,704.50' S= 0.1812 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=6.03 cfs @ 12.06 hrs HW=1,720.07' (Free Discharge)
1=Culvert (Inlet Controls 6.03 cfs @ 3.52 fps)

Summary for Pond 41+25:

Inflow Area = 2.492 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 5.46 cfs @ 12.08 hrs, Volume= 0.328 af
Outflow = 5.46 cfs @ 12.08 hrs, Volume= 0.328 af, Atten= 0%, Lag= 0.0 min
Primary = 5.46 cfs @ 12.08 hrs, Volume= 0.328 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,719.67' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,718.50'	**18.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,718.50' / 1,696.50' S= 0.2750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.36 cfs @ 12.08 hrs HW=1,719.66' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.36 cfs @ 3.66 fps)

Summary for Pond 43+08:

Inflow Area = 2.496 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 5.14 cfs @ 12.10 hrs, Volume= 0.329 af
Outflow = 5.14 cfs @ 12.10 hrs, Volume= 0.329 af, Atten= 0%, Lag= 0.0 min
Primary = 5.14 cfs @ 12.10 hrs, Volume= 0.329 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,726.88' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,725.75'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,725.75' / 1,724.00' S= 0.0437 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.11 cfs @ 12.10 hrs HW=1,726.87' (Free Discharge)
1=Culvert (Inlet Controls 5.11 cfs @ 3.61 fps)

Summary for Pond 44+45:

Inflow Area = 3.305 ac, 0.00% Impervious, Inflow Depth > 1.33" for 10-yr event
Inflow = 4.17 cfs @ 12.16 hrs, Volume= 0.367 af
Outflow = 4.17 cfs @ 12.16 hrs, Volume= 0.367 af, Atten= 0%, Lag= 0.0 min
Primary = 4.17 cfs @ 12.16 hrs, Volume= 0.367 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,737.92' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,736.85'	**18.0" Round Culvert** L= 35.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,736.85' / 1,736.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.14 cfs @ 12.16 hrs HW=1,737.91' (Free Discharge)
1=Culvert (Barrel Controls 4.14 cfs @ 4.34 fps)

Summary for Pond 45+03:

Inflow Area = 2.435 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 6.12 cfs @ 12.04 hrs, Volume= 0.322 af
Outflow = 6.12 cfs @ 12.04 hrs, Volume= 0.322 af, Atten= 0%, Lag= 0.0 min
Primary = 6.12 cfs @ 12.04 hrs, Volume= 0.322 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,741.62' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,740.50'	**24.0" Round Culvert** L= 42.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,740.50' / 1,740.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=5.98 cfs @ 12.04 hrs HW=1,741.61' (Free Discharge)
1=Culvert (Barrel Controls 5.98 cfs @ 4.86 fps)

Summary for Pond 46+45:

Inflow Area = 2.501 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 6.09 cfs @ 12.05 hrs, Volume= 0.330 af
Outflow = 6.09 cfs @ 12.05 hrs, Volume= 0.330 af, Atten= 0%, Lag= 0.0 min
Primary = 6.09 cfs @ 12.05 hrs, Volume= 0.330 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.08' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**24.0" Round Culvert** L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,743.00' S= 0.1111 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=6.04 cfs @ 12.05 hrs HW=1,749.07' (Free Discharge)
↑**1=Culvert** (Inlet Controls 6.04 cfs @ 3.52 fps)

Summary for Pond 50+90: Stream Crossing

Inflow Area = 14.796 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 30.45 cfs @ 12.10 hrs, Volume= 1.949 af
Outflow = 30.45 cfs @ 12.10 hrs, Volume= 1.949 af, Atten= 0%, Lag= 0.0 min
Primary = 30.45 cfs @ 12.10 hrs, Volume= 1.949 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,738.24' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,737.00'	**84.0" Round Culvert w/ 42.0" inside fill** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,733.50' / 1,714.00' S= 0.2437 '/' Cc= 0.900 n= 0.013, Flow Area= 19.24 sf

Primary OutFlow Max=30.30 cfs @ 12.10 hrs HW=1,738.23' (Free Discharge)
1=Culvert (Inlet Controls 30.30 cfs @ 3.59 fps)

Summary for Pond 56+97: 8' Box Stream Crossing

Inflow Area = 23.084 ac, 0.00% Impervious, Inflow Depth > 1.13" for 10-yr event
Inflow = 27.39 cfs @ 12.19 hrs, Volume= 2.174 af
Outflow = 27.39 cfs @ 12.19 hrs, Volume= 2.174 af, Atten= 0%, Lag= 0.0 min
Primary = 27.39 cfs @ 12.19 hrs, Volume= 2.174 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,731.13' @ 12.19 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,730.00'	**96.0" W x 54.0" H Box Culvert** L= 75.0' Box, 0° wingwalls, square crown edge, Ke= 0.700 Inlet / Outlet Invert= 1,730.00' / 1,725.00' S= 0.0667 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 36.00 sf

Primary OutFlow Max=27.19 cfs @ 12.19 hrs HW=1,731.13' (Free Discharge)
1=Culvert (Inlet Controls 27.19 cfs @ 3.01 fps)

Summary for Pond 58+85:

Inflow Area = 3.030 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 5.72 cfs @ 12.14 hrs, Volume= 0.399 af
Outflow = 5.72 cfs @ 12.14 hrs, Volume= 0.399 af, Atten= 0%, Lag= 0.0 min
Primary = 5.72 cfs @ 12.14 hrs, Volume= 0.399 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,743.29' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,742.25'	**24.0" Round Culvert** L= 42.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,742.25' / 1,740.50' S= 0.0417 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=5.66 cfs @ 12.14 hrs HW=1,743.28' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.66 cfs @ 3.46 fps)

Summary for Pond 61+00:

Inflow Area = 2.329 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 4.67 cfs @ 12.11 hrs, Volume= 0.307 af
Outflow = 4.67 cfs @ 12.11 hrs, Volume= 0.307 af, Atten= 0%, Lag= 0.0 min
Primary = 4.67 cfs @ 12.11 hrs, Volume= 0.307 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,772.56' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,771.50'	**18.0" Round Culvert** L= 46.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,771.50' / 1,764.50' S= 0.1522 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.62 cfs @ 12.11 hrs HW=1,772.55' (Free Discharge)
1=Culvert (Inlet Controls 4.62 cfs @ 3.49 fps)

Summary for Pond 62+95:

Inflow Area = 1.536 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 3.11 cfs @ 12.12 hrs, Volume= 0.211 af
Outflow = 3.11 cfs @ 12.12 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min
Primary = 3.11 cfs @ 12.12 hrs, Volume= 0.211 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,799.91' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,799.00'	**15.0" Round Culvert** L= 61.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,799.00' / 1,788.00' S= 0.1803 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.06 cfs @ 12.12 hrs HW=1,799.90' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.06 cfs @ 3.23 fps)

Summary for Pond 64+57:

Inflow Area = 3.965 ac, 0.00% Impervious, Inflow Depth > 1.63" for 10-yr event
Inflow = 4.91 cfs @ 12.40 hrs, Volume= 0.540 af
Outflow = 4.91 cfs @ 12.40 hrs, Volume= 0.540 af, Atten= 0%, Lag= 0.0 min
Primary = 4.91 cfs @ 12.40 hrs, Volume= 0.540 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,823.84' @ 12.40 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,822.75'	**18.0" Round Culvert** L= 47.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,822.75' / 1,819.25' S= 0.0745 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.90 cfs @ 12.40 hrs HW=1,823.84' (Free Discharge)
1=Culvert (Inlet Controls 4.90 cfs @ 3.56 fps)

Summary for Pond 68+70:

Inflow Area = 3.348 ac, 0.00% Impervious, Inflow Depth > 1.64" for 10-yr event
Inflow = 4.73 cfs @ 12.30 hrs, Volume= 0.458 af
Outflow = 4.73 cfs @ 12.30 hrs, Volume= 0.458 af, Atten= 0%, Lag= 0.0 min
Primary = 4.73 cfs @ 12.30 hrs, Volume= 0.458 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,882.32' @ 12.30 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,881.25'	**18.0" Round Culvert** L= 36.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,881.25' / 1,880.00' S= 0.0347 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.72 cfs @ 12.30 hrs HW=1,882.32' (Free Discharge)
1=Culvert (Inlet Controls 4.72 cfs @ 3.51 fps)

Summary for Pond 72+75:

Inflow Area = 1.963 ac, 0.00% Impervious, Inflow Depth > 1.64" for 10-yr event
Inflow = 3.05 cfs @ 12.25 hrs, Volume= 0.269 af
Outflow = 3.05 cfs @ 12.25 hrs, Volume= 0.269 af, Atten= 0%, Lag= 0.0 min
Primary = 3.05 cfs @ 12.25 hrs, Volume= 0.269 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,933.90' @ 12.25 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,933.00'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,933.00' / 1,912.00' S= 0.5250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.04 cfs @ 12.25 hrs HW=1,933.90' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.04 cfs @ 3.23 fps)

Summary for Pond 74+90:

Inflow Area = 5.127 ac, 0.00% Impervious, Inflow Depth > 1.75" for 10-yr event
Inflow = 8.20 cfs @ 12.35 hrs, Volume= 0.746 af
Outflow = 8.20 cfs @ 12.35 hrs, Volume= 0.746 af, Atten= 0%, Lag= 0.0 min
Primary = 8.20 cfs @ 12.35 hrs, Volume= 0.746 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,950.03' @ 12.35 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,948.75'	**24.0" Round Culvert** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,948.75' / 1,943.00' S= 0.0821 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.20 cfs @ 12.35 hrs HW=1,950.03' (Free Discharge)
↑**1=Culvert** (Inlet Controls 8.20 cfs @ 3.86 fps)

Summary for Pond 76+10:

Inflow Area = 1.637 ac, 0.00% Impervious, Inflow Depth > 2.02" for 10-yr event
Inflow = 2.97 cfs @ 12.27 hrs, Volume= 0.275 af
Outflow = 2.97 cfs @ 12.27 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min
Primary = 2.97 cfs @ 12.27 hrs, Volume= 0.275 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,950.64' @ 12.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,949.75'	**15.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,949.75' / 1,949.00' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.95 cfs @ 12.27 hrs HW=1,950.64' (Free Discharge)
1=Culvert (Barrel Controls 2.95 cfs @ 4.45 fps)

Summary for Pond 115+42:

Inflow Area = 2.795 ac, 0.00% Impervious, Inflow Depth > 1.72" for 10-yr event
Inflow = 5.60 cfs @ 12.15 hrs, Volume= 0.400 af
Outflow = 5.60 cfs @ 12.15 hrs, Volume= 0.400 af, Atten= 0%, Lag= 0.0 min
Primary = 5.60 cfs @ 12.15 hrs, Volume= 0.400 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,002.03' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,001.00'	**24.0" Round Culvert** L= 55.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,001.00' / 1,998.50' S= 0.0455 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=5.59 cfs @ 12.15 hrs HW=2,002.03' (Free Discharge)
1=Culvert (Inlet Controls 5.59 cfs @ 3.45 fps)

Summary for Pond 122+38:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 1.72" for 10-yr event
Inflow = 4.40 cfs @ 12.09 hrs, Volume= 0.271 af
Outflow = 4.40 cfs @ 12.09 hrs, Volume= 0.271 af, Atten= 0%, Lag= 0.0 min
Primary = 4.40 cfs @ 12.09 hrs, Volume= 0.271 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,045.02' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,044.00'	**18.0" Round Culvert** L= 65.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,044.00' / 2,043.25' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.34 cfs @ 12.09 hrs HW=2,045.01' (Free Discharge)
1=Culvert (Inlet Controls 4.34 cfs @ 3.42 fps)

Summary for Pond 171+50:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 1.58" for 10-yr event
Inflow = 2.97 cfs @ 12.18 hrs, Volume= 0.230 af
Outflow = 2.97 cfs @ 12.18 hrs, Volume= 0.230 af, Atten= 0%, Lag= 0.0 min
Primary = 2.97 cfs @ 12.18 hrs, Volume= 0.230 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 0.92' @ 12.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 0.00' / -0.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.95 cfs @ 12.18 hrs HW=0.92' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 2.95 cfs @ 4.27 fps)

Summary for Pond 181+30:

Inflow Area = 1.786 ac, 0.00% Impervious, Inflow Depth > 1.13" for 10-yr event
Inflow = 2.14 cfs @ 12.18 hrs, Volume= 0.168 af
Outflow = 2.14 cfs @ 12.18 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min
Primary = 2.14 cfs @ 12.18 hrs, Volume= 0.168 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 0.75' @ 12.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 0.00' / -0.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.12 cfs @ 12.18 hrs HW=0.75' (Free Discharge)
1=Culvert (Barrel Controls 2.12 cfs @ 3.98 fps)

Summary for Pond 200+80:

Inflow Area = 2.919 ac, 0.00% Impervious, Inflow Depth > 1.80" for 10-yr event
Inflow = 6.11 cfs @ 12.10 hrs, Volume= 0.438 af
Outflow = 6.11 cfs @ 12.10 hrs, Volume= 0.438 af, Atten= 0%, Lag= 0.0 min
Primary = 6.11 cfs @ 12.10 hrs, Volume= 0.438 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,033.08' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,032.00'	**24.0" Round Culvert** L= 85.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,032.00' / 2,016.00' S= 0.1882 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=6.09 cfs @ 12.10 hrs HW=2,033.08' (Free Discharge)
↑**1=Culvert** (Inlet Controls 6.09 cfs @ 3.53 fps)

Summary for Pond 205+56:

Inflow Area = 1.355 ac, 0.00% Impervious, Inflow Depth > 1.95" for 10-yr event
Inflow = 4.20 cfs @ 12.03 hrs, Volume= 0.221 af
Outflow = 4.20 cfs @ 12.03 hrs, Volume= 0.221 af, Atten= 0%, Lag= 0.0 min
Primary = 4.20 cfs @ 12.03 hrs, Volume= 0.221 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,088.99' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,088.00'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,088.00' / 2,072.00' S= 0.2133 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.08 cfs @ 12.03 hrs HW=2,088.97' (Free Discharge)
1=Culvert (Inlet Controls 4.08 cfs @ 3.36 fps)

Summary for Pond 301+27:

Inflow Area = 1.601 ac, 0.00% Impervious, Inflow Depth > 1.64" for 10-yr event
Inflow = 2.39 cfs @ 12.27 hrs, Volume= 0.219 af
Outflow = 2.39 cfs @ 12.27 hrs, Volume= 0.219 af, Atten= 0%, Lag= 0.0 min
Primary = 2.39 cfs @ 12.27 hrs, Volume= 0.219 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,062.77' @ 12.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,062.00'	**15.0" Round Culvert** L= 100.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,062.00' / 2,056.50' S= 0.0550 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.38 cfs @ 12.27 hrs HW=2,062.77' (Free Discharge)
1=Culvert (Inlet Controls 2.38 cfs @ 2.99 fps)

Summary for Pond 303+10:

Inflow Area = 2.092 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 4.05 cfs @ 12.14 hrs, Volume= 0.287 af
Outflow = 4.05 cfs @ 12.14 hrs, Volume= 0.287 af, Atten= 0%, Lag= 0.0 min
Primary = 4.05 cfs @ 12.14 hrs, Volume= 0.287 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,050.52' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,049.50'	**18.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,049.50' / 2,049.00' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.03 cfs @ 12.14 hrs HW=2,050.51' (Free Discharge)
1=Culvert (Barrel Controls 4.03 cfs @ 4.49 fps)

Summary for Pond 304+15:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 1.65" for 10-yr event
Inflow = 2.83 cfs @ 12.14 hrs, Volume= 0.200 af
Outflow = 2.83 cfs @ 12.14 hrs, Volume= 0.200 af, Atten= 0%, Lag= 0.0 min
Primary = 2.83 cfs @ 12.14 hrs, Volume= 0.200 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,049.36' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,048.50'	**15.0" Round Culvert** L= 72.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,048.50' / 2,046.00' S= 0.0347 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.81 cfs @ 12.14 hrs HW=2,049.35' (Free Discharge)
1=Culvert (Inlet Controls 2.81 cfs @ 3.15 fps)

Summary for Subcatchment WS 10+30:

Runoff = 2.44 cfs @ 12.04 hrs, Volume= 0.132 af, Depth> 2.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
25,637	77	Woods, Good, HSG D
2,707	96	Gravel surface, HSG C
28,344	79	Weighted Average
28,344		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	150	0.2530	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.1	16	0.2530	2.51		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
11.8	166	Total			

Summary for Subcatchment WS 115+42:

Runoff = 4.15 cfs @ 12.12 hrs, Volume= 0.280 af, Depth> 2.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
47,988	77	Woods, Good, HSG D
10,460	96	Gravel surface, HSG C
58,448	80	Weighted Average
58,448		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.7	150	0.0900	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.1	95	0.0800	1.41		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	204	0.1200	10.95	131.37	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
19.1	449	Total			

Summary for Subcatchment WS 12+40:

Runoff = 5.18 cfs @ 12.08 hrs, Volume= 0.316 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
68,060	77	Woods, Good, HSG D
2,605	96	Gravel surface, HSG C
70,665	78	Weighted Average
70,665		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	150	0.3670	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.1	775	0.2600	2.55		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	165	0.0060	5.55	88.78	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
15.7	1,090	Total			

Summary for Subcatchment WS 122+38:

Runoff = 6.16 cfs @ 12.08 hrs, Volume= 0.380 af, Depth> 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
73,140	77	Woods, Good, HSG D
8,888	96	Gravel surface, HSG C
82,028	79	Weighted Average
82,028		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.4	150	0.1500	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.1	173	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	167	0.0350	5.91	70.95	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
16.0	490	Total			

Summary for Subcatchment WS 14+35:

Runoff = 2.42 cfs @ 12.02 hrs, Volume= 0.125 af, Depth> 2.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
24,639	77	Woods, Good, HSG D
2,186	96	Gravel surface, HSG C
26,825	79	Weighted Average
26,825		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	150	0.3800	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.3	128	0.0080	6.41	102.52	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
10.3	278	Total			

Summary for Subcatchment WS 16+82:

Runoff = 22.51 cfs @ 12.13 hrs, Volume= 1.571 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
359,886	77	Woods, Good, HSG D
4,733	96	Gravel surface, HSG C
364,619	77	Weighted Average
364,619		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	150	0.1430	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.6	880	0.2700	2.60		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.3	1,030	Total			

Summary for Subcatchment WS 171+50:

Runoff = 4.25 cfs @ 12.18 hrs, Volume= 0.327 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
26,096	71	Meadow, non-grazed, HSG C
22,966	70	Woods, Good, HSG C
10,307	74	>75% Grass cover, Good, HSG C
16,726	96	Gravel surface, HSG C
76,095	77	Weighted Average
76,095		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.4	100	0.0200	0.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.8	368	0.0300	7.39	88.72	**Channel Flow, ditch** Area= 12.0 sf Perim= 15.0' r= 0.80' n= 0.030 Earth, grassed & winding
24.0	618	Total			

Summary for Subcatchment WS 18+55:

Runoff = 8.00 cfs @ 12.07 hrs, Volume= 0.475 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
107,750	77	Woods, Good, HSG D
2,340	96	Gravel surface, HSG C
110,090	77	Weighted Average
110,090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.4	835	0.4000	3.16		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	155	0.0190	9.90	118.80	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
14.9	1,140	Total			

Summary for Subcatchment WS 181+30:

Runoff = 3.30 cfs @ 12.18 hrs, Volume= 0.254 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
77,785	70	Woods, Good, HSG C
77,785		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.8	150	0.0600	0.12		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
0.7	50	0.0600	1.22		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
2.0	363	0.0050	3.02	36.22	**Channel Flow, ditch** Area= 12.0 sf Perim= 15.0' r= 0.80' n= 0.030 Earth, grassed & winding
23.5	563	Total			

Summary for Subcatchment WS 2+05:

Runoff = 18.09 cfs @ 12.16 hrs, Volume= 1.345 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

	Area (sf)	CN	Description
	300,915	77	Woods, Good, HSG D
*	9,945	61	Treatment Swale
	1,496	96	Gravel surface, HSG C
	312,356	77	Weighted Average
	312,356		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	150	0.1670	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
8.9	930	0.1200	1.73		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
22.7	1,080	Total			

Summary for Subcatchment WS 20+50:

Runoff = 5.77 cfs @ 12.07 hrs, Volume= 0.343 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
77,556	77	Woods, Good, HSG D
1,800	96	Gravel surface, HSG C
79,356	77	Weighted Average
79,356		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.4	835	0.4000	3.16		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.3	155	0.0190	9.90	118.80	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
14.9	1,140	Total			

Summary for Subcatchment WS 200+80:

Runoff = 3.62 cfs @ 12.04 hrs, Volume= 0.204 af, Depth> 2.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
21,222	77	Woods, Good, HSG D
14,796	96	Gravel surface, HSG C
36,018	85	Weighted Average
36,018		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	117	0.1300	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"

Summary for Subcatchment WS 205+56:

Runoff = 5.71 cfs @ 12.03 hrs, Volume= 0.304 af, Depth> 2.69"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
42,737	77	Woods, Good, HSG D
16,287	96	Gravel surface, HSG C
59,024	82	Weighted Average
59,024		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.0	159	0.3300	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"

Summary for Subcatchment WS 22+00:

Runoff = 8.82 cfs @ 12.10 hrs, Volume= 0.561 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
169,921	70	Woods, Good, HSG C
1,440	96	Gravel surface, HSG C
171,361	70	Weighted Average
171,361		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.5	910	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	96	0.0300	12.44	149.28	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.0	1,156	Total			

Summary for Subcatchment WS 23+25:

Runoff = 5.71 cfs @ 12.15 hrs, Volume= 0.415 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
95,376	77	Woods, Good, HSG D
1,080	96	Gravel surface, HSG C
96,456	77	Weighted Average
96,456		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.4	1,050	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	35	0.0150	8.80	105.56	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
21.9	1,235	Total			

Summary for Subcatchment WS 24+13:

Runoff = 6.66 cfs @ 12.15 hrs, Volume= 0.485 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
111,596	77	Woods, Good, HSG D
996	96	Gravel surface, HSG C
112,592	77	Weighted Average
112,592		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.4	1,050	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	35	0.0150	8.80	105.56	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
21.9	1,235	Total			

Summary for Subcatchment WS 25+06:

Runoff = 8.30 cfs @ 12.16 hrs, Volume= 0.616 af, Depth> 2.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
133,112	77	Woods, Good, HSG D
4,838	96	Gravel surface, HSG C
137,950	78	Weighted Average
137,950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.5	150	0.0930	0.14		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.9	820	0.3050	2.76		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	232	0.2700	21.19	381.45	**Trap/Vee/Rect Channel Flow,** Bot.W=3.00' D=2.00' Z= 3.0 '/' Top.W=15.00' n= 0.040 Mountain streams
22.6	1,202	Total			

Summary for Subcatchment WS 27+05:

Runoff = 8.52 cfs @ 12.08 hrs, Volume= 0.512 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
116,346	77	Woods, Good, HSG D
2,220	96	Gravel surface, HSG C
118,566	77	Weighted Average
118,566		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.3	150	0.2800	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.8	640	0.3100	2.78		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	100	0.0620	17.88	214.60	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
15.2	890	Total			

Summary for Subcatchment WS 28+20:

Runoff = 5.02 cfs @ 12.04 hrs, Volume= 0.274 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
61,916	77	Woods, Good, HSG D
1,380	96	Gravel surface, HSG C
63,296	77	Weighted Average
63,296		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.2	150	0.3600	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	365	0.3400	2.92		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
12.3	515	Total			

Summary for Subcatchment WS 30+00:

Runoff = 8.55 cfs @ 12.10 hrs, Volume= 0.545 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
124,161	77	Woods, Good, HSG D
2,160	96	Gravel surface, HSG C
126,321	77	Weighted Average
126,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.2500	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.3	908	0.3300	2.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.2	1,083	Total			

Summary for Subcatchment WS 30+45:

Runoff = 2.90 cfs @ 12.10 hrs, Volume= 0.185 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
40,042	77	Woods, Good, HSG D
1,320	96	Gravel surface, HSG C
41,362	78	Weighted Average
41,362		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.8	150	0.2500	0.21		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.3	908	0.3300	2.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.2	1,083	Total			

Summary for Subcatchment WS 301+27:

Runoff = 3.40 cfs @ 12.27 hrs, Volume= 0.310 af, Depth> 2.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
64,421	77	Woods, Good, HSG D
5,319	96	Gravel surface, HSG C
69,740	78	Weighted Average
69,740		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.4	150	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
3.1	392	0.1800	2.12		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
31.5	542	Total			

Summary for Subcatchment WS 303+10:

Runoff = 5.74 cfs @ 12.14 hrs, Volume= 0.407 af, Depth> 2.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
87,719	77	Woods, Good, HSG D
3,416	96	Gravel surface, HSG C
91,135	78	Weighted Average
91,135		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.6	150	0.0800	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	299	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	82	0.0300	5.47	65.68	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
20.9	531	Total			

Summary for Subcatchment WS 304+15:

Runoff = 4.01 cfs @ 12.14 hrs, Volume= 0.283 af, Depth> 2.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
59,287	77	Woods, Good, HSG D
4,009	96	Gravel surface, HSG C
63,296	78	Weighted Average
63,296		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.6	150	0.0800	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.1	299	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.7	449	Total			

Summary for Subcatchment WS 31+15:

Runoff = 9.61 cfs @ 12.10 hrs, Volume= 0.621 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
143,160	77	Woods, Good, HSG D
840	96	Gravel surface, HSG C
144,000	77	Weighted Average
144,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	150	0.2630	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.1	1,000	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.7	1,175	Total			

Summary for Subcatchment WS 31+85:

Runoff = 3.25 cfs @ 12.10 hrs, Volume= 0.210 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
47,785	77	Woods, Good, HSG D
840	96	Gravel surface, HSG C
48,625	77	Weighted Average
48,625		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.5	150	0.2630	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.1	1,000	0.3000	2.74		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	25	0.0075	6.20	99.26	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
17.7	1,175	Total			

Summary for Subcatchment WS 32+50:

Runoff = 17.18 cfs @ 12.06 hrs, Volume= 1.000 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
228,024	77	Woods, Good, HSG D
3,636	96	Gravel surface, HSG C
0	70	Woods, Good, HSG C
231,660	77	Weighted Average
231,660		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.4200	0.26		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.6	825	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	190	0.0920	21.73	347.66	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
14.3	1,165	Total			

Summary for Subcatchment WS 36+55:

Runoff = 6.15 cfs @ 12.06 hrs, Volume= 0.357 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
81,253	77	Woods, Good, HSG D
1,416	96	Gravel surface, HSG C
0	70	Woods, Good, HSG C
82,669	77	Weighted Average
82,669		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	150	0.4200	0.26		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
4.6	825	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
14.2	975	Total			

Summary for Subcatchment WS 37+72:

Runoff = 3.13 cfs @ 12.06 hrs, Volume= 0.182 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
39,193	77	Woods, Good, HSG D
1,380	96	Gravel surface, HSG C
40,573	78	Weighted Average
40,573		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.3	150	0.3500	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.8	680	0.3600	3.00		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	80	0.0900	21.49	343.86	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 3.0 '/' Top.W=14.00' n= 0.022 Earth, clean & straight
14.2	910	Total			

Summary for Subcatchment WS 38+77:

Runoff = 6.74 cfs @ 12.05 hrs, Volume= 0.381 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
86,843	77	Woods, Good, HSG D
1,300	96	Gravel surface, HSG C
88,143	77	Weighted Average
88,143		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	150	0.3270	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.7	610	0.5860	3.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	65	0.0230	10.89	130.71	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
13.4	825	Total			

Summary for Subcatchment WS 4+15:

Runoff = 4.94 cfs @ 12.09 hrs, Volume= 0.309 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
65,304	77	Woods, Good, HSG D
3,803	96	Gravel surface, HSG C
69,107	78	Weighted Average
69,107		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.4	150	0.1270	0.16		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
1.2	130	0.1250	1.77		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
16.6	280	Total			

Summary for Subcatchment WS 40+45:

Runoff = 8.60 cfs @ 12.05 hrs, Volume= 0.487 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
105,775	77	Woods, Good, HSG D
2,868	96	Gravel surface, HSG C
108,643	78	Weighted Average
108,643		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	150	0.3270	0.24		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.7	610	0.5860	3.83		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	65	0.0230	10.89	130.71	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
13.4	825	Total			

Summary for Subcatchment WS 41+25:

Runoff = 7.77 cfs @ 12.08 hrs, Volume= 0.468 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
106,430	77	Woods, Good, HSG D
2,100	96	Gravel surface, HSG C
108,530	77	Weighted Average
108,530		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	150	0.2100	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	565	0.5500	3.71		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	170	0.0650	18.31	219.73	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
15.3	885	Total			

Summary for Subcatchment WS 43+08:

Runoff = 7.32 cfs @ 12.10 hrs, Volume= 0.469 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
107,045	77	Woods, Good, HSG D
1,680	96	Gravel surface, HSG C
108,725	77	Weighted Average
108,725		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	575	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	95	0.0800	20.31	243.77	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.4	820	Total			

Summary for Subcatchment WS 44+45:

Runoff = 4.46 cfs @ 12.10 hrs, Volume= 0.285 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
65,569	77	Woods, Good, HSG D
600	96	Gravel surface, HSG C
66,169	77	Weighted Average
66,169		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.5	575	0.6000	3.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	95	0.0800	20.31	243.77	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
17.4	820	Total			

Summary for Subcatchment WS 45+03:

Runoff = 8.68 cfs @ 12.03 hrs, Volume= 0.459 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
104,320	77	Woods, Good, HSG D
1,765	96	Gravel surface, HSG C
106,085	77	Weighted Average
106,085		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.5	150	0.5700	0.30		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
2.6	565	0.5100	3.57		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.2	150	0.0430	14.89	178.72	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.022 Earth, clean & straight
11.3	865	Total			

Summary for Subcatchment WS 46+45:

Runoff = 8.64 cfs @ 12.04 hrs, Volume= 0.471 af, Depth> 2.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
106,776	77	Woods, Good, HSG D
2,170	96	Gravel surface, HSG C
108,946	77	Weighted Average
108,946		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.1	150	0.4800	0.28		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.1	630	0.4700	3.43		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.1	30	0.0430	6.55	78.64	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
12.3	810	Total			

Summary for Subcatchment WS 5+82:

Runoff = 4.29 cfs @ 12.11 hrs, Volume= 0.280 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
60,296	77	Woods, Good, HSG D
2,284	96	Gravel surface, HSG C
62,580	78	Weighted Average
62,580		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.7	150	0.1430	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.3	504	0.2560	2.53		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.0	654	Total			

Summary for Subcatchment WS 50+90:

Runoff = 43.42 cfs @ 12.10 hrs, Volume= 2.780 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
13,719	77	Woods, Good, HSG D
7,857	96	Gravel surface, HSG C
622,955	77	Woods, Good, HSG D
644,531	77	Weighted Average
644,531		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0	150	0.3800	0.25		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
7.4	1,168	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
17.4	1,318	Total			

Summary for Subcatchment WS 56+97:

Runoff = 42.37 cfs @ 12.18 hrs, Volume= 3.284 af, Depth> 1.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
15,978	77	Woods, Good, HSG D
5,437	96	Gravel surface, HSG C
984,105	70	Woods, Good, HSG C
1,005,520	70	Weighted Average
1,005,520		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.8	150	0.2030	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
10.6	1,473	0.2150	2.32		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.4	260	0.0730	11.88	285.01	**Trap/Vee/Rect Channel Flow,** Bot.W=6.00' D=2.00' Z= 3.0 '/' Top.W=18.00' n= 0.040 Mountain streams
23.8	1,883	Total			

Summary for Subcatchment WS 58+85:

Runoff = 8.17 cfs @ 12.13 hrs, Volume= 0.569 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
129,392	77	Woods, Good, HSG D
2,580	96	Gravel surface, HSG C
131,972	77	Weighted Average
131,972		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
8.8	1,287	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
20.2	1,437	Total			

Summary for Subcatchment WS 61+00:

Runoff = 6.67 cfs @ 12.11 hrs, Volume= 0.438 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
99,071	77	Woods, Good, HSG D
2,400	96	Gravel surface, HSG C
101,471	77	Weighted Average
101,471		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	150	0.2700	0.22		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.8	1,000	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.2	1,150	Total			

Summary for Subcatchment WS 62+95:

Runoff = 4.40 cfs @ 12.12 hrs, Volume= 0.299 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
64,988	77	Woods, Good, HSG D
1,920	96	Gravel surface, HSG C
66,908	78	Weighted Average
66,908		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.4	150	0.1800	0.19		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
6.0	960	0.2800	2.65		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
19.4	1,110	Total			

Summary for Subcatchment WS 64+57:

Runoff = 6.99 cfs @ 12.39 hrs, Volume= 0.765 af, Depth> 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
167,760	77	Woods, Good, HSG D
4,944	96	Gravel surface, HSG C
172,704	78	Weighted Average
172,704		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
38.8	130	0.0100	0.06		**Sheet Flow,** Grass: Bermuda n= 0.410 P2= 2.70"
2.2	430	0.4100	3.20		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.5	331	0.1500	12.24	146.87	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
41.5	891	Total			

Summary for Subcatchment WS 68+70:

Runoff = 6.72 cfs @ 12.30 hrs, Volume= 0.648 af, Depth> 2.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
141,041	77	Woods, Good, HSG D
4,800	96	Gravel surface, HSG C
145,841	78	Weighted Average
145,841		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
23.7	120	0.0100	0.08		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
5.4	30	0.0700	0.09		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.2	332	0.0450	1.06		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.0	28	0.1400	11.82	141.89	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
34.3	510	Total			

Summary for Subcatchment WS 7+26:

Runoff = 19.86 cfs @ 12.11 hrs, Volume= 1.314 af, Depth> 2.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
303,561	77	Woods, Good, HSG D
1,339	96	Gravel surface, HSG C
304,900	77	Weighted Average
304,900		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.8	150	0.1400	0.17		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.7	538	0.2400	2.45		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
18.5	688	Total			

Summary for Subcatchment WS 72+75:

Runoff = 4.33 cfs @ 12.24 hrs, Volume= 0.381 af, Depth> 2.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
82,987	77	Woods, Good, HSG D
2,520	96	Gravel surface, HSG C
85,507	78	Weighted Average
85,507		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
24.5	125	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
2.1	25	0.5000	0.20		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
3.2	444	0.2200	2.35		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
0.0	12	0.1700	13.03	156.36	**Trap/Vee/Rect Channel Flow,** Bot.W=2.00' D=2.00' Z= 2.0 '/' Top.W=10.00' n= 0.050
29.8	606	Total			

Summary for Subcatchment WS 74+90:

Runoff = 7.16 cfs @ 12.28 hrs, Volume= 0.674 af, Depth> 2.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
121,052	77	Woods, Good, HSG D
20,255	96	Gravel surface, HSG C
141,307	80	Weighted Average
141,307		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.1	135	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
1.4	15	0.5000	0.18		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.70"
5.6	624	0.1400	1.87		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
33.1	774	Total			

Summary for Subcatchment WS 76+10:

Runoff = 4.05 cfs @ 12.27 hrs, Volume= 0.376 af, Depth> 2.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type II 24-hr 25-yr Rainfall=4.80"

Area (sf)	CN	Description
49,875	77	Woods, Good, HSG D
21,418	96	Gravel surface, HSG C
71,293	83	Weighted Average
71,293		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.4	150	0.0100	0.09		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.70"
0.1	25	0.5000	4.95		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
3.7	245	0.0490	1.11		**Shallow Concentrated Flow,** Woodland Kv= 5.0 fps
32.2	420	Total			

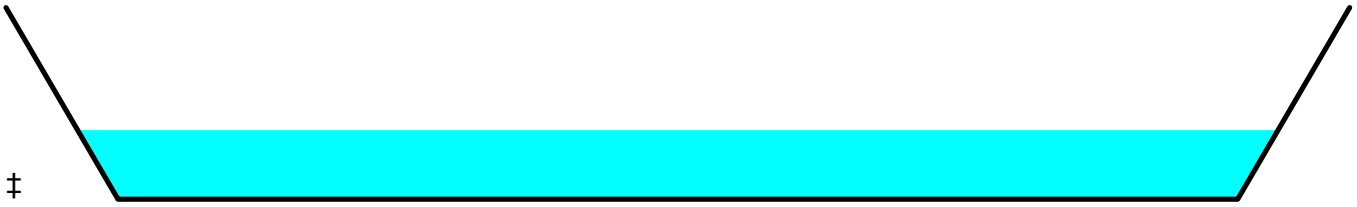
Summary for Reach 1R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 4.25 cfs @ 12.18 hrs, Volume= 0.327 af
Outflow = 3.99 cfs @ 12.34 hrs, Volume= 0.323 af, Atten= 6%, Lag= 9.8 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.43 fps, Min. Travel Time= 5.8 min
Avg. Velocity = 0.13 fps, Avg. Travel Time= 19.2 min

Peak Storage= 1,400 cf @ 12.24 hrs
Average Depth at Peak Storage= 0.18'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 22.44 cfs

50.00' x 0.50' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 150.0' Slope= 0.1367 '/'
Inlet Invert= 2,085.00', Outlet Invert= 2,064.50'



‡

Summary for Reach 2R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 2.22" for 25-yr event
Inflow = 3.99 cfs @ 12.34 hrs, Volume= 0.323 af
Outflow = 3.34 cfs @ 12.64 hrs, Volume= 0.315 af, Atten= 16%, Lag= 18.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.20 fps, Min. Travel Time= 10.9 min
Avg. Velocity = 0.42 fps, Avg. Travel Time= 31.5 min

Peak Storage= 2,204 cf @ 12.46 hrs
Average Depth at Peak Storage= 0.06'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 135.64 cfs

50.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 785.0' Slope= 0.3121 '/'
Inlet Invert= 2,064.50', Outlet Invert= 1,819.50'

Summary for Reach 3R:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 2.17" for 25-yr event
Inflow = 3.34 cfs @ 12.64 hrs, Volume= 0.315 af
Outflow = 3.33 cfs @ 12.66 hrs, Volume= 0.315 af, Atten= 0%, Lag= 1.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.44 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 2.11 fps, Avg. Travel Time= 1.8 min

Peak Storage= 143 cf @ 12.65 hrs
Average Depth at Peak Storage= 0.17'
Bank-Full Depth= 2.00' Flow Area= 18.0 sf, Capacity= 381.02 cfs

3.00' x 2.00' deep channel, n= 0.040 Earth, cobble bottom, clean sides
Side Slope Z-value= 3.0 '/' Top Width= 15.00'
Length= 232.0' Slope= 0.2694 '/'
Inlet Invert= 1,819.50', Outlet Invert= 1,757.00'

Summary for Reach 4R:

Inflow Area = 2.092 ac, 0.00% Impervious, Inflow Depth > 2.33" for 25-yr event
Inflow = 5.74 cfs @ 12.14 hrs, Volume= 0.407 af
Outflow = 5.70 cfs @ 12.15 hrs, Volume= 0.407 af, Atten= 1%, Lag= 0.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.75 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.63 fps, Avg. Travel Time= 1.2 min

Peak Storage= 139 cf @ 12.14 hrs
Average Depth at Peak Storage= 0.42'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 132.31 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 115.0' Slope= 0.1217 '/'
Inlet Invert= 2,046.00', Outlet Invert= 2,032.00'

Summary for Reach 5R:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 2.33" for 25-yr event
Inflow = 4.01 cfs @ 12.14 hrs, Volume= 0.283 af
Outflow = 3.92 cfs @ 12.18 hrs, Volume= 0.282 af, Atten= 2%, Lag= 2.5 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.25 fps, Min. Travel Time= 1.4 min
Avg. Velocity = 1.44 fps, Avg. Travel Time= 4.2 min

Peak Storage= 343 cf @ 12.15 hrs
Average Depth at Peak Storage= 0.35'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 131.67 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 365.0' Slope= 0.1205 '/'
Inlet Invert= 2,045.00', Outlet Invert= 2,001.00'

Summary for Reach 7R:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 2.42" for 25-yr event
Inflow = 6.16 cfs @ 12.08 hrs, Volume= 0.380 af
Outflow = 5.10 cfs @ 12.32 hrs, Volume= 0.373 af, Atten= 17%, Lag= 13.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.02 fps, Min. Travel Time= 9.0 min
Avg. Velocity = 0.32 fps, Avg. Travel Time= 29.0 min

Peak Storage= 2,757 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.10'
Bank-Full Depth= 1.00' Flow Area= 60.0 sf, Capacity= 261.57 cfs

50.00' x 1.00' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 10.0 '/' Top Width= 70.00'
Length= 550.0' Slope= 0.1059 '/'
Inlet Invert= 2,043.25', Outlet Invert= 1,985.00'

Summary for Reach 44R:

Inflow Area = 1.786 ac, 0.00% Impervious, Inflow Depth > 1.71" for 25-yr event
Inflow = 3.30 cfs @ 12.18 hrs, Volume= 0.254 af
Outflow = 3.20 cfs @ 12.28 hrs, Volume= 0.253 af, Atten= 3%, Lag= 5.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.26 fps, Min. Travel Time= 3.5 min
Avg. Velocity = 1.44 fps, Avg. Travel Time= 7.9 min

Peak Storage= 672 cf @ 12.22 hrs
Average Depth at Peak Storage= 0.02'
Bank-Full Depth= 0.50' Flow Area= 27.5 sf, Capacity= 732.88 cfs

50.00' x 0.50' deep channel, n= 0.025 Earth, clean & winding
Side Slope Z-value= 10.0 '/' Top Width= 60.00'
Length= 680.0' Slope= 0.5695 '/'
Inlet Invert= 2,113.50', Outlet Invert= 1,726.25'

Summary for Reach 123R:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 2.37" for 25-yr event
Inflow = 5.10 cfs @ 12.32 hrs, Volume= 0.373 af
Outflow = 5.02 cfs @ 12.34 hrs, Volume= 0.372 af, Atten= 2%, Lag= 1.7 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.76 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 1.63 fps, Avg. Travel Time= 2.7 min

Peak Storage= 277 cf @ 12.33 hrs
Average Depth at Peak Storage= 0.38'
Bank-Full Depth= 2.00' Flow Area= 12.0 sf, Capacity= 140.35 cfs

2.00' x 2.00' deep channel, n= 0.050 Earth, long dense weeds
Side Slope Z-value= 2.0 '/' Top Width= 10.00'
Length= 261.0' Slope= 0.1370 '/'
Inlet Invert= 1,985.00', Outlet Invert= 1,949.25'

Summary for Pond 2+02: Stream Crossing

Inflow Area = 7.171 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 18.09 cfs @ 12.16 hrs, Volume= 1.345 af
Outflow = 18.09 cfs @ 12.16 hrs, Volume= 1.345 af, Atten= 0%, Lag= 0.0 min
Primary = 18.09 cfs @ 12.16 hrs, Volume= 1.345 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,759.97' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,759.00'	**72.0" Round Culvert w/ 36.0" inside fill** L= 120.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,756.00' / 1,741.25' S= 0.1229 '/' Cc= 0.900 n= 0.013, Flow Area= 14.14 sf

Primary OutFlow Max=17.94 cfs @ 12.16 hrs HW=1,759.96' (Free Discharge)
1=Culvert (Inlet Controls 17.94 cfs @ 3.17 fps)

Summary for Pond 4+15:

Inflow Area = 1.586 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 4.94 cfs @ 12.09 hrs, Volume= 0.309 af
Outflow = 4.94 cfs @ 12.09 hrs, Volume= 0.309 af, Atten= 0%, Lag= 0.0 min
Primary = 4.94 cfs @ 12.09 hrs, Volume= 0.309 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.10' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**18.0" Round Culvert** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.00' / 1,746.50' S= 0.0643 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.88 cfs @ 12.09 hrs HW=1,752.09' (Free Discharge)
↑**1=Culvert** (Inlet Controls 4.88 cfs @ 3.55 fps)

Summary for Pond 5+82:

Inflow Area = 1.437 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 4.29 cfs @ 12.11 hrs, Volume= 0.280 af
Outflow = 4.29 cfs @ 12.11 hrs, Volume= 0.280 af, Atten= 0%, Lag= 0.0 min
Primary = 4.29 cfs @ 12.11 hrs, Volume= 0.280 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.50' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.50'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.50' / 1,749.00' S= 0.0375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=4.26 cfs @ 12.11 hrs HW=1,751.50' (Free Discharge)
↑**1=Culvert** (Inlet Controls 4.26 cfs @ 3.40 fps)

Summary for Pond 7+26: Stream Crossing

Inflow Area = 7.000 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 19.86 cfs @ 12.11 hrs, Volume= 1.314 af
Outflow = 19.86 cfs @ 12.11 hrs, Volume= 1.314 af, Atten= 0%, Lag= 0.0 min
Primary = 19.86 cfs @ 12.11 hrs, Volume= 1.314 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.39' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**48.0" Round Culvert w/ 24.0" inside fill** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.00' / 1,745.00' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 6.28 sf

Primary OutFlow Max=19.62 cfs @ 12.11 hrs HW=1,752.38' (Free Discharge)
1=Culvert (Inlet Controls 19.62 cfs @ 3.89 fps)

Summary for Pond 10+30:

Inflow Area = 0.651 ac, 0.00% Impervious, Inflow Depth > 2.43" for 25-yr event
Inflow = 2.44 cfs @ 12.04 hrs, Volume= 0.132 af
Outflow = 2.44 cfs @ 12.04 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.0 min
Primary = 2.44 cfs @ 12.04 hrs, Volume= 0.132 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.03' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.25'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.25' / 1,742.50' S= 0.1750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.39 cfs @ 12.04 hrs HW=1,752.02' (Free Discharge)
1=Culvert (Inlet Controls 2.39 cfs @ 3.00 fps)

Summary for Pond 12+40:

Inflow Area = 1.622 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 5.18 cfs @ 12.08 hrs, Volume= 0.316 af
Outflow = 5.18 cfs @ 12.08 hrs, Volume= 0.316 af, Atten= 0%, Lag= 0.0 min
Primary = 5.18 cfs @ 12.08 hrs, Volume= 0.316 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,751.13' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.00'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.00' / 1,730.00' S= 0.2667 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.09 cfs @ 12.08 hrs HW=1,751.12' (Free Discharge)
1=Culvert (Inlet Controls 5.09 cfs @ 3.60 fps)

Summary for Pond 14+35:

Inflow Area = 0.616 ac, 0.00% Impervious, Inflow Depth > 2.43" for 25-yr event
Inflow = 2.42 cfs @ 12.02 hrs, Volume= 0.125 af
Outflow = 2.42 cfs @ 12.02 hrs, Volume= 0.125 af, Atten= 0%, Lag= 0.0 min
Primary = 2.42 cfs @ 12.02 hrs, Volume= 0.125 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.78' @ 12.02 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**15.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,728.00' S= 0.2667 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.36 cfs @ 12.02 hrs HW=1,748.77' (Free Discharge)
1=Culvert (Inlet Controls 2.36 cfs @ 2.98 fps)

Summary for Pond 16+82: Stream Crossing

Inflow Area = 8.371 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 22.51 cfs @ 12.13 hrs, Volume= 1.571 af
Outflow = 22.51 cfs @ 12.13 hrs, Volume= 1.571 af, Atten= 0%, Lag= 0.0 min
Primary = 22.51 cfs @ 12.13 hrs, Volume= 1.571 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,741.87' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,740.75'	**72.0" Round Culvert w/ 36.0" inside fill** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,737.75' / 1,734.00' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 14.14 sf

Primary OutFlow Max=22.25 cfs @ 12.13 hrs HW=1,741.86' (Free Discharge)
1=Culvert (Inlet Controls 22.25 cfs @ 3.41 fps)

Summary for Pond 18+55:

Inflow Area = 2.527 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 8.00 cfs @ 12.07 hrs, Volume= 0.475 af
Outflow = 8.00 cfs @ 12.07 hrs, Volume= 0.475 af, Atten= 0%, Lag= 0.0 min
Primary = 8.00 cfs @ 12.07 hrs, Volume= 0.475 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,745.13' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,743.50'	**18.0" Round Culvert** L= 58.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,743.50' / 1,732.00' S= 0.1983 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=7.84 cfs @ 12.07 hrs HW=1,745.10' (Free Discharge)
↑**1=Culvert** (Inlet Controls 7.84 cfs @ 4.44 fps)

Summary for Pond 20+50:

Inflow Area = 1.822 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 5.77 cfs @ 12.07 hrs, Volume= 0.343 af
Outflow = 5.77 cfs @ 12.07 hrs, Volume= 0.343 af, Atten= 0%, Lag= 0.0 min
Primary = 5.77 cfs @ 12.07 hrs, Volume= 0.343 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,748.47' @ 12.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,747.25'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,747.25' / 1,744.50' S= 0.0688 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.65 cfs @ 12.07 hrs HW=1,748.45' (Free Discharge)
1=Culvert (Inlet Controls 5.65 cfs @ 3.73 fps)

Summary for Pond 22+00:

Inflow Area = 3.934 ac, 0.00% Impervious, Inflow Depth > 1.71" for 25-yr event
Inflow = 8.82 cfs @ 12.10 hrs, Volume= 0.561 af
Outflow = 8.82 cfs @ 12.10 hrs, Volume= 0.561 af, Atten= 0%, Lag= 0.0 min
Primary = 8.82 cfs @ 12.10 hrs, Volume= 0.561 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.83' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,751.00'	**18.0" Round Culvert** L= 60.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,751.00' / 1,739.00' S= 0.2000 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=8.80 cfs @ 12.10 hrs HW=1,752.82' (Free Discharge)
1=Culvert (Inlet Controls 8.80 cfs @ 4.98 fps)

Summary for Pond 23+25:

Inflow Area = 2.214 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 5.71 cfs @ 12.15 hrs, Volume= 0.415 af
Outflow = 5.71 cfs @ 12.15 hrs, Volume= 0.415 af, Atten= 0%, Lag= 0.0 min
Primary = 5.71 cfs @ 12.15 hrs, Volume= 0.415 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,755.46' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,754.25'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,754.25' / 1,735.50' S= 0.2500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.70 cfs @ 12.15 hrs HW=1,755.46' (Free Discharge)
↑**1=Culvert** (Inlet Controls 5.70 cfs @ 3.74 fps)

Summary for Pond 24+13:

Inflow Area = 2.585 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 6.66 cfs @ 12.15 hrs, Volume= 0.485 af
Outflow = 6.66 cfs @ 12.15 hrs, Volume= 0.485 af, Atten= 0%, Lag= 0.0 min
Primary = 6.66 cfs @ 12.15 hrs, Volume= 0.485 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,757.61' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,756.25'	**18.0" Round Culvert** L= 91.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,756.25' / 1,731.00' S= 0.2775 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.65 cfs @ 12.15 hrs HW=1,757.60' (Free Discharge)
1=Culvert (Inlet Controls 6.65 cfs @ 3.96 fps)

Summary for Pond 25+06: Stream Crossing

Inflow Area = 4.914 ac, 0.00% Impervious, Inflow Depth > 2.27" for 25-yr event
Inflow = 8.50 cfs @ 12.16 hrs, Volume= 0.931 af
Outflow = 8.50 cfs @ 12.16 hrs, Volume= 0.931 af, Atten= 0%, Lag= 0.0 min
Primary = 8.50 cfs @ 12.16 hrs, Volume= 0.931 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,757.66' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,757.00'	**60.0" Round Culvert w/ 30.0" inside fill** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,754.50' / 1,734.00' S= 0.2562 '/' Cc= 0.900 n= 0.013, Flow Area= 9.82 sf

Primary OutFlow Max=8.43 cfs @ 12.16 hrs HW=1,757.65' (Free Discharge)
1=Culvert (Inlet Controls 8.43 cfs @ 2.61 fps)

Summary for Pond 27+05:

Inflow Area = 2.722 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 8.52 cfs @ 12.08 hrs, Volume= 0.512 af
Outflow = 8.52 cfs @ 12.08 hrs, Volume= 0.512 af, Atten= 0%, Lag= 0.0 min
Primary = 8.52 cfs @ 12.08 hrs, Volume= 0.512 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,752.50' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,750.75'	**18.0" Round Culvert** L= 53.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,750.75' / 1,742.50' S= 0.1557 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=8.36 cfs @ 12.08 hrs HW=1,752.47' (Free Discharge)
1=Culvert (Inlet Controls 8.36 cfs @ 4.73 fps)

Summary for Pond 28+20:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 5.02 cfs @ 12.04 hrs, Volume= 0.274 af
Outflow = 5.02 cfs @ 12.04 hrs, Volume= 0.274 af, Atten= 0%, Lag= 0.0 min
Primary = 5.02 cfs @ 12.04 hrs, Volume= 0.274 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,750.62' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.25'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.25' / 1,748.85' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.96 cfs @ 12.04 hrs HW=1,750.61' (Free Discharge)
↑**1=Culvert** (Barrel Controls 4.96 cfs @ 4.63 fps)

Summary for Pond 30+00:

Inflow Area = 2.900 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 8.55 cfs @ 12.10 hrs, Volume= 0.545 af
Outflow = 8.55 cfs @ 12.10 hrs, Volume= 0.545 af, Atten= 0%, Lag= 0.0 min
Primary = 8.55 cfs @ 12.10 hrs, Volume= 0.545 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.57' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.25'	**24.0" Round Culvert** L= 60.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.25' / 1,741.00' S= 0.1208 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.53 cfs @ 12.10 hrs HW=1,749.56' (Free Discharge)
↑**1=Culvert** (Inlet Controls 8.53 cfs @ 3.90 fps)

Summary for Pond 30+45:

Inflow Area = 0.950 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 2.90 cfs @ 12.10 hrs, Volume= 0.185 af
Outflow = 2.90 cfs @ 12.10 hrs, Volume= 0.185 af, Atten= 0%, Lag= 0.0 min
Primary = 2.90 cfs @ 12.10 hrs, Volume= 0.185 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.12' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.25'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.25' / 1,746.50' S= 0.0437 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.89 cfs @ 12.10 hrs HW=1,749.12' (Free Discharge)
1=Culvert (Inlet Controls 2.89 cfs @ 3.17 fps)

Summary for Pond 31+15:

Inflow Area = 3.306 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 9.61 cfs @ 12.10 hrs, Volume= 0.621 af
Outflow = 9.61 cfs @ 12.10 hrs, Volume= 0.621 af, Atten= 0%, Lag= 0.0 min
Primary = 9.61 cfs @ 12.10 hrs, Volume= 0.621 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.41' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**24.0" Round Culvert** L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,744.50' S= 0.0778 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=9.57 cfs @ 12.10 hrs HW=1,749.41' (Free Discharge)
1=Culvert (Inlet Controls 9.57 cfs @ 4.04 fps)

Summary for Pond 31+85:

Inflow Area = 1.116 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 3.25 cfs @ 12.10 hrs, Volume= 0.210 af
Outflow = 3.25 cfs @ 12.10 hrs, Volume= 0.210 af, Atten= 0%, Lag= 0.0 min
Primary = 3.25 cfs @ 12.10 hrs, Volume= 0.210 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.76' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.75'	**15.0" Round Culvert** L= 35.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.75' / 1,748.40' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.23 cfs @ 12.10 hrs HW=1,749.75' (Free Discharge)
1=Culvert (Barrel Controls 3.23 cfs @ 4.19 fps)

Summary for Pond 32+50: Stream Crossing

Inflow Area = 5.318 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 17.18 cfs @ 12.06 hrs, Volume= 1.000 af
Outflow = 17.18 cfs @ 12.06 hrs, Volume= 1.000 af, Atten= 0%, Lag= 0.0 min
Primary = 17.18 cfs @ 12.06 hrs, Volume= 1.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.84' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.00'	**84.0" Round Culvert w/ 42.0" inside fill** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,745.50' / 1,729.50' S= 0.2286 '/' Cc= 0.900 n= 0.013, Flow Area= 19.24 sf

Primary OutFlow Max=16.86 cfs @ 12.06 hrs HW=1,749.83' (Free Discharge)
1=Culvert (Inlet Controls 16.86 cfs @ 2.94 fps)

Summary for Pond 36+55:

Inflow Area = 1.898 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 6.15 cfs @ 12.06 hrs, Volume= 0.357 af
Outflow = 6.15 cfs @ 12.06 hrs, Volume= 0.357 af, Atten= 0%, Lag= 0.0 min
Primary = 6.15 cfs @ 12.06 hrs, Volume= 0.357 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,760.42' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,759.15'	**18.0" Round Culvert** L= 55.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,759.15' / 1,749.00' S= 0.1845 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.04 cfs @ 12.06 hrs HW=1,760.41' (Free Discharge)
↑**1=Culvert** (Inlet Controls 6.04 cfs @ 3.82 fps)

Summary for Pond 37+72:

Inflow Area = 0.931 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 3.13 cfs @ 12.06 hrs, Volume= 0.182 af
Outflow = 3.13 cfs @ 12.06 hrs, Volume= 0.182 af, Atten= 0%, Lag= 0.0 min
Primary = 3.13 cfs @ 12.06 hrs, Volume= 0.182 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,750.16' @ 12.06 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,749.25'	**15.0" Round Culvert** L= 48.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,749.25' / 1,744.00' S= 0.1094 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.07 cfs @ 12.06 hrs HW=1,750.15' (Free Discharge)
↑**1=Culvert** (Inlet Controls 3.07 cfs @ 3.24 fps)

Summary for Pond 38+77:

Inflow Area = 2.023 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 6.74 cfs @ 12.05 hrs, Volume= 0.381 af
Outflow = 6.74 cfs @ 12.05 hrs, Volume= 0.381 af, Atten= 0%, Lag= 0.0 min
Primary = 6.74 cfs @ 12.05 hrs, Volume= 0.381 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,737.37' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,736.00'	**18.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,736.00' / 1,711.00' S= 0.3125 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.69 cfs @ 12.05 hrs HW=1,737.36' (Free Discharge)
↑**1=Culvert** (Inlet Controls 6.69 cfs @ 3.97 fps)

Summary for Pond 40+45:

Inflow Area = 2.494 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 8.60 cfs @ 12.05 hrs, Volume= 0.487 af
Outflow = 8.60 cfs @ 12.05 hrs, Volume= 0.487 af, Atten= 0%, Lag= 0.0 min
Primary = 8.60 cfs @ 12.05 hrs, Volume= 0.487 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,720.32' @ 12.05 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,719.00'	**24.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,719.00' / 1,704.50' S= 0.1812 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.53 cfs @ 12.05 hrs HW=1,720.31' (Free Discharge)
↑**1=Culvert** (Inlet Controls 8.53 cfs @ 3.90 fps)

Summary for Pond 41+25:

Inflow Area = 2.492 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 7.77 cfs @ 12.08 hrs, Volume= 0.468 af
Outflow = 7.77 cfs @ 12.08 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min
Primary = 7.77 cfs @ 12.08 hrs, Volume= 0.468 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,720.08' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,718.50'	**18.0" Round Culvert** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,718.50' / 1,696.50' S= 0.2750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=7.63 cfs @ 12.08 hrs HW=1,720.05' (Free Discharge)
1=Culvert (Inlet Controls 7.63 cfs @ 4.32 fps)

Summary for Pond 43+08:

Inflow Area = 2.496 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 7.32 cfs @ 12.10 hrs, Volume= 0.469 af
Outflow = 7.32 cfs @ 12.10 hrs, Volume= 0.469 af, Atten= 0%, Lag= 0.0 min
Primary = 7.32 cfs @ 12.10 hrs, Volume= 0.469 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,727.24' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,725.75'	**18.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,725.75' / 1,724.00' S= 0.0437 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=7.32 cfs @ 12.10 hrs HW=1,727.24' (Free Discharge)
↑**1=Culvert** (Inlet Controls 7.32 cfs @ 4.15 fps)

Summary for Pond 44+45:

Inflow Area = 3.305 ac, 0.00% Impervious, Inflow Depth > 1.95" for 25-yr event
Inflow = 6.49 cfs @ 12.16 hrs, Volume= 0.538 af
Outflow = 6.49 cfs @ 12.16 hrs, Volume= 0.538 af, Atten= 0%, Lag= 0.0 min
Primary = 6.49 cfs @ 12.16 hrs, Volume= 0.538 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,738.29' @ 12.16 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,736.85'	**18.0" Round Culvert** L= 35.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,736.85' / 1,736.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.45 cfs @ 12.16 hrs HW=1,738.28' (Free Discharge)
1=Culvert (Barrel Controls 6.45 cfs @ 4.77 fps)

Summary for Pond 45+03:

Inflow Area = 2.435 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 8.68 cfs @ 12.03 hrs, Volume= 0.459 af
Outflow = 8.68 cfs @ 12.03 hrs, Volume= 0.459 af, Atten= 0%, Lag= 0.0 min
Primary = 8.68 cfs @ 12.03 hrs, Volume= 0.459 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,741.90' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,740.50'	**24.0" Round Culvert** L= 42.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,740.50' / 1,740.00' S= 0.0119 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.47 cfs @ 12.03 hrs HW=1,741.87' (Free Discharge)
1=Culvert (Barrel Controls 8.47 cfs @ 5.20 fps)

Summary for Pond 46+45:

Inflow Area = 2.501 ac, 0.00% Impervious, Inflow Depth > 2.26" for 25-yr event
Inflow = 8.64 cfs @ 12.04 hrs, Volume= 0.471 af
Outflow = 8.64 cfs @ 12.04 hrs, Volume= 0.471 af, Atten= 0%, Lag= 0.0 min
Primary = 8.64 cfs @ 12.04 hrs, Volume= 0.471 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,749.32' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,748.00'	**24.0" Round Culvert** L= 45.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,748.00' / 1,743.00' S= 0.1111 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.54 cfs @ 12.04 hrs HW=1,749.31' (Free Discharge)
↑**1=Culvert** (Inlet Controls 8.54 cfs @ 3.90 fps)

Summary for Pond 50+90: Stream Crossing

Inflow Area = 14.796 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 43.42 cfs @ 12.10 hrs, Volume= 2.780 af
Outflow = 43.42 cfs @ 12.10 hrs, Volume= 2.780 af, Atten= 0%, Lag= 0.0 min
Primary = 43.42 cfs @ 12.10 hrs, Volume= 2.780 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,738.58' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,737.00'	**84.0" Round Culvert w/ 42.0" inside fill** L= 80.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,733.50' / 1,714.00' S= 0.2437 '/' Cc= 0.900 n= 0.013, Flow Area= 19.24 sf

Primary OutFlow Max=43.39 cfs @ 12.10 hrs HW=1,738.58' (Free Discharge)
1=Culvert (Inlet Controls 43.39 cfs @ 4.08 fps)

Summary for Pond 56+97: 8' Box Stream Crossing

Inflow Area = 23.084 ac, 0.00% Impervious, Inflow Depth > 1.71" for 25-yr event
Inflow = 42.37 cfs @ 12.18 hrs, Volume= 3.284 af
Outflow = 42.37 cfs @ 12.18 hrs, Volume= 3.284 af, Atten= 0%, Lag= 0.0 min
Primary = 42.37 cfs @ 12.18 hrs, Volume= 3.284 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,731.52' @ 12.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,730.00'	**96.0" W x 54.0" H Box Culvert** L= 75.0' Box, 0° wingwalls, square crown edge, Ke= 0.700 Inlet / Outlet Invert= 1,730.00' / 1,725.00' S= 0.0667 '/' Cc= 0.900 n= 0.040 Earth, cobble bottom, clean sides, Flow Area= 36.00 sf

Primary OutFlow Max=41.99 cfs @ 12.18 hrs HW=1,731.51' (Free Discharge)
1=Culvert (Inlet Controls 41.99 cfs @ 3.48 fps)

Summary for Pond 58+85:

Inflow Area = 3.030 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 8.17 cfs @ 12.13 hrs, Volume= 0.569 af
Outflow = 8.17 cfs @ 12.13 hrs, Volume= 0.569 af, Atten= 0%, Lag= 0.0 min
Primary = 8.17 cfs @ 12.13 hrs, Volume= 0.569 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,743.53' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,742.25'	**24.0" Round Culvert** L= 42.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,742.25' / 1,740.50' S= 0.0417 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.08 cfs @ 12.13 hrs HW=1,743.52' (Free Discharge)
1=Culvert (Inlet Controls 8.08 cfs @ 3.84 fps)

Summary for Pond 61+00:

Inflow Area = 2.329 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 6.67 cfs @ 12.11 hrs, Volume= 0.438 af
Outflow = 6.67 cfs @ 12.11 hrs, Volume= 0.438 af, Atten= 0%, Lag= 0.0 min
Primary = 6.67 cfs @ 12.11 hrs, Volume= 0.438 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,772.86' @ 12.11 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,771.50'	**18.0" Round Culvert** L= 46.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,771.50' / 1,764.50' S= 0.1522 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.61 cfs @ 12.11 hrs HW=1,772.85' (Free Discharge)
↑**1=Culvert** (Inlet Controls 6.61 cfs @ 3.95 fps)

Summary for Pond 62+95:

Inflow Area = 1.536 ac, 0.00% Impervious, Inflow Depth > 2.34" for 25-yr event
Inflow = 4.40 cfs @ 12.12 hrs, Volume= 0.299 af
Outflow = 4.40 cfs @ 12.12 hrs, Volume= 0.299 af, Atten= 0%, Lag= 0.0 min
Primary = 4.40 cfs @ 12.12 hrs, Volume= 0.299 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,800.17' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,799.00'	**15.0" Round Culvert** L= 61.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,799.00' / 1,788.00' S= 0.1803 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.33 cfs @ 12.12 hrs HW=1,800.15' (Free Discharge)
1=Culvert (Inlet Controls 4.33 cfs @ 3.66 fps)

Summary for Pond 64+57:

Inflow Area = 3.965 ac, 0.00% Impervious, Inflow Depth > 2.32" for 25-yr event
Inflow = 6.99 cfs @ 12.39 hrs, Volume= 0.765 af
Outflow = 6.99 cfs @ 12.39 hrs, Volume= 0.765 af, Atten= 0%, Lag= 0.0 min
Primary = 6.99 cfs @ 12.39 hrs, Volume= 0.765 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,824.16' @ 12.39 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,822.75'	**18.0" Round Culvert** L= 47.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,822.75' / 1,819.25' S= 0.0745 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.97 cfs @ 12.39 hrs HW=1,824.16' (Free Discharge)
1=Culvert (Inlet Controls 6.97 cfs @ 4.04 fps)

Summary for Pond 68+70:

Inflow Area = 3.348 ac, 0.00% Impervious, Inflow Depth > 2.32" for 25-yr event
Inflow = 6.72 cfs @ 12.30 hrs, Volume= 0.648 af
Outflow = 6.72 cfs @ 12.30 hrs, Volume= 0.648 af, Atten= 0%, Lag= 0.0 min
Primary = 6.72 cfs @ 12.30 hrs, Volume= 0.648 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,882.62' @ 12.30 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,881.25'	**18.0" Round Culvert** L= 36.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,881.25' / 1,880.00' S= 0.0347 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.72 cfs @ 12.30 hrs HW=1,882.62' (Free Discharge)
↑**1=Culvert** (Inlet Controls 6.72 cfs @ 3.98 fps)

Summary for Pond 72+75:

Inflow Area = 1.963 ac, 0.00% Impervious, Inflow Depth > 2.33" for 25-yr event
Inflow = 4.33 cfs @ 12.24 hrs, Volume= 0.381 af
Outflow = 4.33 cfs @ 12.24 hrs, Volume= 0.381 af, Atten= 0%, Lag= 0.0 min
Primary = 4.33 cfs @ 12.24 hrs, Volume= 0.381 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,934.15' @ 12.24 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,933.00'	**15.0" Round Culvert** L= 40.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,933.00' / 1,912.00' S= 0.5250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.31 cfs @ 12.24 hrs HW=1,934.15' (Free Discharge)
1=Culvert (Inlet Controls 4.31 cfs @ 3.65 fps)

Summary for Pond 74+90:

Inflow Area = 5.127 ac, 0.00% Impervious, Inflow Depth > 2.45" for 25-yr event
Inflow = 12.02 cfs @ 12.32 hrs, Volume= 1.046 af
Outflow = 12.02 cfs @ 12.32 hrs, Volume= 1.046 af, Atten= 0%, Lag= 0.0 min
Primary = 12.02 cfs @ 12.32 hrs, Volume= 1.046 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,950.39' @ 12.32 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,948.75'	**24.0" Round Culvert** L= 70.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,948.75' / 1,943.00' S= 0.0821 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=11.91 cfs @ 12.32 hrs HW=1,950.38' (Free Discharge)
1=Culvert (Inlet Controls 11.91 cfs @ 4.35 fps)

Summary for Pond 76+10:

Inflow Area = 1.637 ac, 0.00% Impervious, Inflow Depth > 2.76" for 25-yr event
Inflow = 4.05 cfs @ 12.27 hrs, Volume= 0.376 af
Outflow = 4.05 cfs @ 12.27 hrs, Volume= 0.376 af, Atten= 0%, Lag= 0.0 min
Primary = 4.05 cfs @ 12.27 hrs, Volume= 0.376 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1,950.85' @ 12.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	1,949.75'	**15.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 1,949.75' / 1,949.00' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.02 cfs @ 12.27 hrs HW=1,950.84' (Free Discharge)
1=Culvert (Barrel Controls 4.02 cfs @ 4.73 fps)

Summary for Pond 115+42:

Inflow Area = 2.795 ac, 0.00% Impervious, Inflow Depth > 2.41" for 25-yr event
Inflow = 7.89 cfs @ 12.15 hrs, Volume= 0.562 af
Outflow = 7.89 cfs @ 12.15 hrs, Volume= 0.562 af, Atten= 0%, Lag= 0.0 min
Primary = 7.89 cfs @ 12.15 hrs, Volume= 0.562 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,002.25' @ 12.15 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,001.00'	**24.0" Round Culvert** L= 55.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,001.00' / 1,998.50' S= 0.0455 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=7.87 cfs @ 12.15 hrs HW=2,002.25' (Free Discharge)
1=Culvert (Inlet Controls 7.87 cfs @ 3.81 fps)

Summary for Pond 122+38:

Inflow Area = 1.883 ac, 0.00% Impervious, Inflow Depth > 2.42" for 25-yr event
Inflow = 6.16 cfs @ 12.08 hrs, Volume= 0.380 af
Outflow = 6.16 cfs @ 12.08 hrs, Volume= 0.380 af, Atten= 0%, Lag= 0.0 min
Primary = 6.16 cfs @ 12.08 hrs, Volume= 0.380 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,045.28' @ 12.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,044.00'	**18.0" Round Culvert** L= 65.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,044.00' / 2,043.25' S= 0.0115 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=6.06 cfs @ 12.08 hrs HW=2,045.26' (Free Discharge)
1=Culvert (Inlet Controls 6.06 cfs @ 3.82 fps)

Summary for Pond 171+50:

Inflow Area = 1.747 ac, 0.00% Impervious, Inflow Depth > 2.25" for 25-yr event
Inflow = 4.25 cfs @ 12.18 hrs, Volume= 0.327 af
Outflow = 4.25 cfs @ 12.18 hrs, Volume= 0.327 af, Atten= 0%, Lag= 0.0 min
Primary = 4.25 cfs @ 12.18 hrs, Volume= 0.327 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 1.18' @ 12.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 0.00' / -0.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=4.21 cfs @ 12.18 hrs HW=1.17' (Free Discharge)
↑**1=Culvert** (Barrel Controls 4.21 cfs @ 4.58 fps)

Summary for Pond 181+30:

Inflow Area = 1.786 ac, 0.00% Impervious, Inflow Depth > 1.71" for 25-yr event
Inflow = 3.30 cfs @ 12.18 hrs, Volume= 0.254 af
Outflow = 3.30 cfs @ 12.18 hrs, Volume= 0.254 af, Atten= 0%, Lag= 0.0 min
Primary = 3.30 cfs @ 12.18 hrs, Volume= 0.254 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 0.99' @ 12.18 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	**15.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 0.00' / -0.50' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.27 cfs @ 12.18 hrs HW=0.98' (Free Discharge)
↑**1=Culvert** (Barrel Controls 3.27 cfs @ 4.36 fps)

Summary for Pond 200+80:

Inflow Area = 2.919 ac, 0.00% Impervious, Inflow Depth > 2.51" for 25-yr event
Inflow = 8.51 cfs @ 12.10 hrs, Volume= 0.611 af
Outflow = 8.51 cfs @ 12.10 hrs, Volume= 0.611 af, Atten= 0%, Lag= 0.0 min
Primary = 8.51 cfs @ 12.10 hrs, Volume= 0.611 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,033.31' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,032.00'	**24.0" Round Culvert** L= 85.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,032.00' / 2,016.00' S= 0.1882 '/' Cc= 0.900 n= 0.013, Flow Area= 3.14 sf

Primary OutFlow Max=8.47 cfs @ 12.10 hrs HW=2,033.31' (Free Discharge)
1=Culvert (Inlet Controls 8.47 cfs @ 3.89 fps)

Summary for Pond 205+56:

Inflow Area = 1.355 ac, 0.00% Impervious, Inflow Depth > 2.69" for 25-yr event
Inflow = 5.71 cfs @ 12.03 hrs, Volume= 0.304 af
Outflow = 5.71 cfs @ 12.03 hrs, Volume= 0.304 af, Atten= 0%, Lag= 0.0 min
Primary = 5.71 cfs @ 12.03 hrs, Volume= 0.304 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,089.21' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,088.00'	**18.0" Round Culvert** L= 75.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,088.00' / 2,072.00' S= 0.2133 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.56 cfs @ 12.03 hrs HW=2,089.19' (Free Discharge)
1=Culvert (Inlet Controls 5.56 cfs @ 3.71 fps)

Summary for Pond 301+27:

Inflow Area = 1.601 ac, 0.00% Impervious, Inflow Depth > 2.33" for 25-yr event
Inflow = 3.40 cfs @ 12.27 hrs, Volume= 0.310 af
Outflow = 3.40 cfs @ 12.27 hrs, Volume= 0.310 af, Atten= 0%, Lag= 0.0 min
Primary = 3.40 cfs @ 12.27 hrs, Volume= 0.310 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,062.97' @ 12.26 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,062.00'	**15.0" Round Culvert** L= 100.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,062.00' / 2,056.50' S= 0.0550 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.38 cfs @ 12.27 hrs HW=2,062.96' (Free Discharge)
1=Culvert (Inlet Controls 3.38 cfs @ 3.34 fps)

Summary for Pond 303+10:

Inflow Area = 2.092 ac, 0.00% Impervious, Inflow Depth > 2.33" for 25-yr event
Inflow = 5.74 cfs @ 12.14 hrs, Volume= 0.407 af
Outflow = 5.74 cfs @ 12.14 hrs, Volume= 0.407 af, Atten= 0%, Lag= 0.0 min
Primary = 5.74 cfs @ 12.14 hrs, Volume= 0.407 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,050.78' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,049.50'	**18.0" Round Culvert** L= 50.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,049.50' / 2,049.00' S= 0.0100 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.69 cfs @ 12.14 hrs HW=2,050.77' (Free Discharge)
1=Culvert (Barrel Controls 5.69 cfs @ 4.82 fps)

Summary for Pond 304+15:

Inflow Area = 1.453 ac, 0.00% Impervious, Inflow Depth > 2.33" for 25-yr event
Inflow = 4.01 cfs @ 12.14 hrs, Volume= 0.283 af
Outflow = 4.01 cfs @ 12.14 hrs, Volume= 0.283 af, Atten= 0%, Lag= 0.0 min
Primary = 4.01 cfs @ 12.14 hrs, Volume= 0.283 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 2,049.58' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	2,048.50'	**15.0" Round Culvert** L= 72.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 2,048.50' / 2,046.00' S= 0.0347 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.97 cfs @ 12.14 hrs HW=2,049.58' (Free Discharge)
1=Culvert (Inlet Controls 3.97 cfs @ 3.53 fps)