

## General Information

Instructions General Volume Rate Quality

|   |                    |  |                        |
|---|--------------------|--|------------------------|
| Project Name:                                     | <b>Rura Field</b>  | Application Type:  | <b>PAG-02 NOI</b>      |
| County:   | <b>Indiana</b>     | Municipality:  | <b>Center Township</b> |
| Project Type:                                     | <b>Other</b>       | <input checked="" type="radio"/> New Project <input type="radio"/> Minor / Major Amendment |                        |
| Total Project Site Area:<br><i>(In Watershed)</i> | <b>91.72</b> acres | Total Earth Disturbance:<br><i>(In Watershed)</i>  | <b>91.72</b> acres     |
| No. of Post-Construction Discharge Points:        | <b>2</b>           | Start DP Numbering at:   | <b>001</b>             |

| Discharge Point (DP) No. | Drainage Area (DA) (acres) | Earth Disturbance in DA (acres) | Existing Impervious in DA (acres) | Proposed Impervious in DA (acres) | Receiving Waters                | Ch. 93 Class | Structural BMP(s) |
|--------------------------|----------------------------|---------------------------------|-----------------------------------|-----------------------------------|---------------------------------|--------------|-------------------|
| 001                      | 26.69                      | 26.69                           | 0.30                              | 0.00                              | Discharge to Non-Surface Waters | WWF          | No                |
| 002                      | 65.03                      | 65.03                           | 0.25                              | 0.00                              | Discharge to Non-Surface Waters | WWF          | Yes               |
| Undetained Areas         |                            |                                 |                                   |                                   |                                 |              |                   |
| <b>Totals:</b>           | <b>91.72</b>               | <b>91.72</b>                    | <b>0.55</b>                       |                                   |                                 |              |                   |

# Volume Management

Project: Rura Field - POA 1

Instructions General **Volume** Rate Quality

2-Year / 24-Hour Storm Event (NOAA Atlas 14):  inches      Alternative 2-Year / 24-Hour Storm Event  inches

Alternative Source:

**Pre-Construction Conditions:**      No. Rows:       ☐ Exempt from Meadow in Good Condition ☒ Automatically Calculate CN, Ia, Runoff and Volume

| Land Cover   | Area (acres) | Soil Group | CN | Ia (in) | Q Runoff (in) | Runoff Volume (cf) |
|--|--------------|------------|----|---------|---------------|--------------------|
| Pervious as Meadow   | 23.38        | D          | 78 | 0.564   | 0.83          | 70,195             |
| Pervious as Meadow   | 2.75         | C          | 71 | 0.817   | 0.52          | 5,205              |
| Impervious Areas: Streets and Roads - Gravel (Including ROW) | 0.09         | C          | 89 | 0.247   | 1.51          | 492                |
| Impervious Areas: Streets and Roads - Gravel (Including ROW) | 0.16         | D          | 91 | 0.198   | 1.67          | 967                |
| Impervious as Meadow   | 0.02         | C          | 71 | 0.817   | 0.52          | 38                 |
| Impervious as Meadow   | 0.03         | D          | 78 | 0.564   | 0.83          | 90                 |
| Pervious as Meadow   | 0.26         | A          | 30 | 4.667   | 0.00          | 0                  |

**TOTAL (ACRES):**      26.69      **TOTAL (CF):**      76,987

**Post-Construction Conditions:**      No. Rows:

| Land Cover  | Area (acres) | Soil Group | CN | Ia (in) | Q Runoff (in) | Runoff Volume (cf) |
|---|--------------|------------|----|---------|---------------|--------------------|
| Meadow-Continuous Grass, Protected from Grazing and Generally Mowed for Hay | 0.26         | A          | 30 | 4.667   | 0.00          | 0                  |

|   |       |       |             |       |      |        |
|---|-------|-------|-------------|-------|------|--------|
| Meadow-Continuous Grass, Protected from Grazing and Generally Mowed for Hay | 23.57 | D     | 78          | 0.564 | 0.83 | 70,765 |
| Meadow-Continuous Grass, Protected from Grazing and Generally Mowed for Hay | 2.86  | C     | 71          | 0.817 | 0.52 | 5,413  |
| TOTAL (ACRES):  |       | 26.69 | TOTAL (CF): |       |      | 76,178 |

IET CHANGE IN VOLUME TO MANAGE (CF):

-809

Non-Structural SCM Volume Credits:

☐ Tree Planting Credit

☐ Other (attach calculations):

Description:

CREDIT (CF):

Structural SCM Volume Credits:

No. Structural SCMs:

Start SCM Numbering at:

| POA No. | SCM No. | SCM Name | MRC? | Discharge | Incremental SCM DA (acres) | Volume Routed to SCM (CF) | Infiltration / Vegetated Area (SF) | Infiltration Rate (in/hr) | Infiltration Period (hrs) | Vegetated? | Media Depth (ft) | Storage Volume (CF) | Infiltration Credit (CF) | ET Credit (CF) |
|---------|---------|----------|------|-----------|----------------------------|---------------------------|------------------------------------|---------------------------|---------------------------|------------|------------------|---------------------|--------------------------|----------------|
|         |         |          |      |           |                            |                           |                                    |                           |                           |            |                  |                     |                          |                |

Totals:

INFILTRATION & ET CREDITS (CF):

NET CHANGE IN VOLUME TO MANAGE (CF):

-809

TOTAL CREDITS (CF):

VOLUME REQUIREMENT SATISFIED

# Volume Management

Project: Rura Field - POA 2

Instructions General **Volume** Rate Quality

2-Year / 24-Hour Storm Event (NOAA Atlas 14):  inches      Alternative 2-Year / 24-Hour Storm Event  inches

Alternative Source:

**Pre-Construction Conditions:**      No. Rows:       ☐ Exempt from Meadow in Good Condition ☒ Automatically Calculate CN, Ia, Runoff and Volume

| Land Cover   | Area (acres) | Soil Group | CN | Ia (in) | Q Runoff (in) | Runoff Volume (cf) |
|--|--------------|------------|----|---------|---------------|--------------------|
| Pervious as Meadow   | 52.96        | D          | 78 | 0.564   | 0.83          | 159,004            |
| Forested (Good Condition)  | 0.81         | D          | 77 | 0.597   | 0.78          | 2,288              |
| Pervious as Meadow   | 2.67         | A          | 30 | 4.667   | 0.00          | 0                  |
| Pervious as Meadow   | 3.40         | B          | 58 | 1.448   | 0.15          | 1,825              |
| Forested (Good Condition)  | 0.07         | B          | 55 | 1.636   | 0.09          | 23                 |
| Forested (Good Condition)  | 4.88         | A          | 30 | 4.667   | 0.00          | 0                  |
| Impervious Areas: Paved Parking Lots, Roofs, Driveways, Etc. (Excluding ROW) | 0.06         | B          | 98 | 0.041   | 2.33          | 541                |
| Impervious Areas: Paved Parking Lots, Roofs, Driveways, Etc. (Excluding ROW) | 0.14         | D          | 98 | 0.041   | 2.33          | 1,218              |
| Impervious as Meadow   | 0.02         | B          | 58 | 1.448   | 0.15          | 8                  |
| Impervious as Meadow   | 0.03         | D          | 78 | 0.564   | 0.83          | 102                |

TOTAL (ACRES): 65.03

TOTAL (CF): 165,009

## Post-Construction Conditions:

No. Rows: 3

| Land Cover  | Area (acres) | Soil Group | CN | Ia (in) | Q Runoff (in) | Runoff Volume (cf) |
|---|--------------|------------|----|---------|---------------|--------------------|
| Meadow-Continuous Grass, Protected from Grazing and Generally Mowed for Hay | 53.93        | D          | 78 | 0.564   | 0.83          | 161,901            |
| Meadow-Continuous Grass, Protected from Grazing and Generally Mowed for Hay | 7.55         | A          | 30 | 4.667   | 0.00          | 0                  |
| Meadow-Continuous Grass, Protected from Grazing and Generally Mowed for Hay | 3.55         | B          | 58 | 1.448   | 0.15          | 1,907              |

TOTAL (ACRES): 65.03

TOTAL (CF): 163,808

IET CHANGE IN VOLUME TO MANAGE (CF): -1,202

## Non-Structural SCM Volume Credits:

☐ Tree Planting Credit☐ Other (attach calculations):

Description:

CREDIT (CF):

## Structural SCM Volume Credits:

No. Structural SCMs:

Start SCM Numbering at:

| POA No. | SCM No. | SCM Name | MRC? | Discharge | Incremental SCM DA (acres) | Volume Routed to SCM (CF) | Infiltration / Vegetated Area (SF) | Infiltration Rate (in/hr) | Infiltration Period (hrs) | Vegetated? | Media Depth (ft) | Storage Volume (CF) | Infiltration Credit (CF) | ET Credit (CF) |
|---------|---------|----------|------|-----------|----------------------------|---------------------------|------------------------------------|---------------------------|---------------------------|------------|------------------|---------------------|--------------------------|----------------|
|         |         |          |      |           |                            |                           |                                    |                           |                           |            |                  |                     |                          |                |

Totals:

INFILTRATION &amp; ET CREDITS (CF):

NET CHANGE IN VOLUME TO MANAGE (CF):

-1,202

TOTAL CREDITS (CF):

VOLUME REQUIREMENT SATISFIED