

## Chesapeake Fish Passage Prioritization - Dam Fact Sheet

CFPPP Unique ID: **VA\_685**

**LEON HANSEN DAM**

|                           |                                 |
|---------------------------|---------------------------------|
| Bay-wide Diadromous Tier  | 5                               |
| Bay-wide Resident Tier    | 2                               |
| Bay-wide Brook Trout Tier | N/A                             |
| NID ID                    | VA04915                         |
| State ID                  | 685                             |
| River Name                | Hooper Rock Creek               |
| Dam Height (ft)           | 35                              |
| Dam Type                  | Earth                           |
| Latitude                  | 37.7411                         |
| Longitude                 | -78.1514                        |
| Passage Facilities        | None Documented                 |
| Passage Year              | N/A                             |
| Size Class                | 1a: Headwater (0 - 3.861 sq mi) |
| HUC 12                    | Hooper Rock Creek-James River   |
| HUC 10                    | Deep Creek-James River          |
| HUC 8                     | Middle James-Willis             |
| HUC 6                     | James                           |
| HUC 4                     | Lower Chesapeake                |



### Landcover

| NLCD (2011)                                       |       | Chesapeake Conservancy (2016)                   |       |
|---|-------|---|-------|
| % Impervious Surface in Upstream Drainage Area    | 0.16  | % Tree Cover in ARA of Upstream Network         | 87.74 |
| % Natural Cover in Upstream Drainage Area         | 85.64 | % Tree Cover in ARA of Downstream Network       | 79.1  |
| % Forested in Upstream Drainage Area              | 65.42 | % Herbaceous Cover in ARA of Upstream Network   | 2.43  |
| % Agriculture in Upstream Drainage Area           | 12.07 | % Herbaceous Cover in ARA of Downstream Network | 15.73 |
| % Natural Cover in ARA of Upstream Network        | 93.52 | % Barren Cover in ARA of Upstream Network       | 0     |
| % Natural Cover in ARA of Downstream Network      | 79.33 | % Barren Cover in ARA of Downstream Network     | 0.1   |
| % Forest Cover in ARA of Upstream Network         | 70.17 | % Road Impervious in ARA of Upstream Network    | 0     |
| % Forest Cover in ARA of Downstream Network       | 65.28 | % Road Impervious in ARA of Downstream Network  | 0.6   |
| % Agricultural Cover in ARA of Upstream Network   | 6.48  | % Other Impervious in ARA of Upstream Network   | 0.1   |
| % Agricultural Cover in ARA of Downstream Network | 16.03 | % Other Impervious in ARA of Downstream Network | 0.78  |
| % Impervious Surf in ARA of Upstream Network      | 0     |   |       |
| % Impervious Surf in ARA of Downstream Network    | 0.71  |   |       |

Metric descriptions can be found at:

[http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric\\_Glossary.pdf](http://52.53.143.233/chesapeake-dev/plugins/barrier-prioritization-proto2/images/Metric_Glossary.pdf)

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## Network, System Type and Condition

|  |         |                                |   |
|--|---------|--------------------------------|---|
| Functional Upstream Network (mi)                                   | 6.26    | Upstream Size Class Gain (#)   | 0 |
| Total Functional Network (mi)                                      | 5437.28 | # Downstream Natural Barriers  | 0 |
| Absolute Gain (mi)   | 6.26    | # Downstream Hydropower Dams   | 2 |
| # Size Classes in Total Network                                    | 6       | # Downstream Dams with Passage | 4 |
| # Upstream Network Size Classes                                    | 1       | # of Downstream Barriers       | 4 |
| NFHAP Cumulative Disturbance Index                                 | High    |                                |   |
| Dam is on Conserved Land   | Yes     |                                |   |
| % Conserved Land in 100m Buffer of Upstream Network                | 27.55   |                                |   |
| % Conserved Land in 100m Buffer of Downstream Network              | 11.23   |                                |   |
| Density of Crossings in Upstream Network Watershed (#/m2)          | 3.15    |                                |   |
| Density of Crossings in Downstream Network Watershed (#/m2)        | 0.84    |                                |   |
| Density of off-channel dams in Upstream Network Watershed (#/m2)   | 0       |                                |   |
| Density of off-channel dams in Downstream Network Watershed (#/m2) | 0       |                                |   |

## Diadromous Fish

|                                   |                   |                                   |                 |
|-----------------------------------|-------------------|-----------------------------------|-----------------|
| Downstream Alewife                | Potential Current | Downstream Striped Bass           | None Documented |
| Downstream Blueback               | Potential Current | Downstream Atlantic Sturgeon      | None Documented |
| Downstream American Shad          | None Documented   | Downstream Shortnose Sturgeon     | None Documented |
| Downstream Hickory Shad           | None Documented   | Downstream American Eel           | Current         |
| One or More DS Anadromous Species | Potential Curre   | # Diadromous Sp Dnstrm (incl eel) | 1               |

## Resident Fish and Rare Species

|   |     |
|---|-----|
| Barrier is in EBTJV BKT Catchment   | No  |
| Barrier is in Modeled BKT Catchment (DeWeber)   | No  |
| Barrier Blocks an EBTJV Catchment   | Yes |
| Barrier Blocks a Modeled BKT Catchment (DeWeber)  | No  |
| Native Fish Species Richness (HUC8)   | 51  |
| # Rare Fish (HUC8)  | 0   |
| # Rare Mussel (HUC8)  | 3   |
| # Rare Crayfish (HUC8)  | 0   |
| Globally rare or fed listed fish/mussel sp HUC12  | No  |
| Globally rare or fed listed fish/mussel sp in upstream or downstream functional network | Yes |

## Stream Health

|  |           |
|--|-----------|
| Chesapeake Bay Program Stream Health                             | FAIR      |
| MD MBSS Benthic IBI Stream Health                                | N/A       |
| MD MBSS Fish IBI Stream Health                                   | N/A       |
| MD MBSS Combined IBI Stream Health                               | N/A       |
| VA INSTAR mIBI Stream Health                                     | Very High |
| PA IBI Stream Health   | N/A       |
| Rare fish or mussel sp in HUC12                                  | No        |
| Rare fish or mussel in upstream or downstream functional network | Yes       |

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