The Effects of Special Protection Designation



A Guide for Communities

Produced by the Pennsylvania Campaign for Clean Water

February 2007

The Effects of Special Protection Designation

A Guide for Communities

Produced by the Pennsylvania Campaign for Clean Water February 2007

AUTHORS:

Matt Royer, Chesapeake Bay Foundation Bob Wendelgass, Alisha Deen Steindler, Evan Belser, Clean Water Fund Faith Zerbe, Delaware Riverkeeper Network John Hoekstra, Green Valleys Association Barbara Smith, Tobyhanna Creek/Tunkhannock Creek Watershed Association Deb Nardone, Trout Unlimited Lauren Imgrund, The Alliance for Aquatic Resource Monitoring (ALLARM)

Funded in part by the William Penn Foundation

Design by Emily Scott

Printed by Kennedy Printing Company

Pennsylvania Campaign for Clean Water

Formed in 2002, the Pennsylvania Campaign for Clean Water is a coalition of over 130 environmental, conservation, sporting, and religious groups from all corners of the state that speaks in one voice in support of federal and state policies to protect and restore PA's water resources.

Water is one of Pennsylvania's premier natural resources, with 83,184 miles of streams and rivers, 161,445 acres of ponds and lakes, over 403,000 acres of wetlands, and 47 trillion gallons of ground-water. These resources are vital to the quality of life in our communities, providing drinking water for millions and supporting countless industries. Having clean water is extremely important to PA's economy, with fishing activities alone generating \$4.7 billion a year in revenue and supporting 43,000 jobs. Clean water also improves property values, with higher values directly associated with the health of streams and watersheds.

Our Goals are to:

- Keep clean waters clean and to restore damaged waterways
- Facilitate public access to information and participation in decision-making
- Develop comprehensive water resource management policies
- Earn firm, fair, and consistent law enforcement

Contact Pennsylvania Campaign for Clean Water:

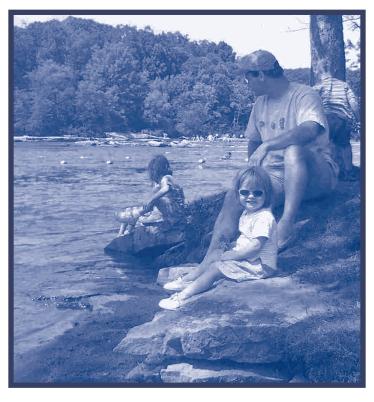
c/o Clean Water Fund Tel. 215.640.8800 Fax 215.640.0930 100 N. 17th Street, Suite 900 Philadelphia, PA 19103

TABLE OF CONTENTS

Designated Uses in Pennsylvania2
Overall Effects of HQ or EV Designation
Development
Municipal Separate Storm Sewer Systems (MS4s)8
Sewage9
Agriculture10
Logging11
Road Building and Maintenance12
Dams13
Docks and Boat Ramps13
Mining14
Waste Management Facilities14
Stream Restoration Projects15
Chart: High Quality (HQ) Effects Overview16–17
Chart: Exceptional Value (EV)Effects Overview
Endnotes

Designated Uses in Pennsylvania

Prior to the passage of the federal Clean Water Act in 1972, many rivers and streams in Pennsylvania were severely polluted from direct, unregulated industrial and residential wastewater disposal. The Clean Water Act established important legal requirements to restore polluted rivers and streams and to prevent further degradation from pollution. Among these was a requirement that each state develop water quality standards to protect and maintain water quality. These standards set designated uses for each river, stream and lake in Pennsylvania ---human or ecological uses protected by law. Designated uses may be categorized as aquatic life uses, water supply uses or recreational uses. Specific types of aquatic life designated uses include Cold Water Fishes (CWF), Warm Water Fishes (WWF) and Trout Stocked Fisheries (TSF).



The CWF, WWF and TSF designated use levels do not offer enough protection to the highest quality rivers and streams. To afford those waters sufficient protection, two **special protection** aquatic life designated uses are also established: **High Quality** (**HQ**) and **Exceptional Value** (**EV**). Waters with HQ or EV designated uses are among the cleanest and most outstanding waters in all of Pennsylvania, and support excellent diversity and populations of aquatic life. Such a waterway is an asset to your community, and there are special protections in place to ensure that its water quality is protected and maintained.

Overall Effects of HQ or EV Designation

So what does a HQ or EV designation mean for your community? It requires that new or expanded activities do not degrade existing water quality. It does not mean development will stop, or that permits for most projects cannot be obtained. It does mean that projects like building a new commercial or residential development, a new or expanded concentrated animal feeding operation (CAFO), a new or expanded sewage treatment plant, or a new road will undergo more rigorous permit review by the Pennsylvania Department of Environmental Protection (DEP) and, in some cases, must meet more stringent requirements to protect water quality.

There are two common ways that EV or HQ status may affect certain projects or activities in your watershed. They are:

- Antidegradation review for proposed new discharges; and
- Individual permits instead of general permits are required in many cases.

Antidegradation Review. As part of the required DEP permitting process, proposed new, additional or increased point source discharges in HQ and EV watersheds must undergo antidegradation review under Pennsylvania's antidegradation regulations.¹ This review is not required in watersheds that are not HQ or EV. Antidegradation review is designed to ensure that water quality of HQ or EV streams is maintained and protected.

Antidegradation review for point source discharges is conducted using a tiered approach, with preference for alternative methods of handling discharges that do not involve direct discharges to surface waters:

- First, the applicant must evaluate **nondischarge alternatives** to the proposed discharge and use an alternative that is environmentally sound and cost-effective when compared with the cost of the proposed discharge.
- Second, if a nondischarge alternative is not environmentally sound and costeffective, the applicant must use the best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies (referred to as ABACT).
- Third, if no environmentally sound and cost-effective nondischarge alternative exists, the applicant must demonstrate that the discharge will maintain and protect existing water quality (non-degrading discharge).
- Fourth, for HQ waters only, if after evaluating all of the above the applicant still proposes a discharge that lowers water quality, the discharge is only permitted if the applicant can demonstrate that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located (SEJ exception). *This SEJ exception is only available in HQ waters. Where discharges are proposed in EV waters, water quality must be maintained and protected without exception.*²

General Permits. In most cases, DEP authorizes discharges and other activities by issuing either general permits or individuals permits. General permits are available for specific categories of lower impact discharges or activities that DEP has determined to be similar in nature, and that can be

OVERALL EFFECTS OF HQ OR EV DESIGNATION



adequately regulated with standardized specifications and conditions. The permit application and review process is generally much easier and quicker for general permits as compared to individual permits.

Individual Permits. All other discharges or activities that require a permit but do not qualify for coverage under a general permit must obtain an individual permit. These may include discharges and activities in HQ or EV watersheds that, but for the HQ or EV designation, would have otherwise been regulated through general permits. Individual permits are permits that are issued for specific projects on specific sites. DEP reviews individual permit applications on a case-by-case basis, and the permit review period is usually longer than for general permits. DEP may issue individual permits with special conditions that apply only to the particular project or site in question. These special conditions may be more stringent than the conditions found in a general permit in order to protect receiving waters and other natural resources affected by the proposed project.

Other Effects of HQ and EV Designation. In many cases, HQ and EV status will have no impact

on projects and activities in your watershed. Existing projects and activities are grandfathered. An upgrade to EV status does not mean you have to stop your discharge, install a more stringent water treatment technology, apply for a new permit, or remove your stream encroachment or facility. Moreover, HQ or EV status does not impose any liability on municipal governments to clean up the stream. Municipalities are further not required to amend any of their local ordinances or to change their practices and criteria for zoning and land development approvals as a result of an upgrade to HQ or EV status.

Some common activities are not impacted at all, even if they are proposed after a stream is redesignated HQ or EV. Road maintenance activities, including winter maintenance and bridge and culvert repairs may continue just as they did prior to HQ or EV designation. There is no impact on the siting, design and operation of on lot sewage systems. Pesticide use or plowing and tilling activities on farms are not impacted.

HQ and EV designation can also have beneficial impacts to your community. It can improve your community's chances of obtaining funding for new or upgraded wastewater treatment facilities or for dirt and gravel road maintenance. EV status also bars the siting of radioactive and hazardous waste disposal facilities in your watershed.

Overall Effects of HQ or EV Designation

The remainder of this document discusses in detail the impacts of HQ and EV designation on specific projects and activities in the following categories.

- Development
- Municipal Separate Storm Sewer Systems (MS4s)
- Sewage
- Agriculture
- Logging
- Road Building and Maintenance
- Dams
- Docks and Boat Ramps
- Mining
- Waste Management Facilities
- Stream Restoration Projects

Following these detailed sections are two charts, which provide an overview of the effects of Special Protection Designation.



Development

Existing Developments

Existing developments are grandfathered with respect to all environmental permitting and approvals, and thus EV or HQ status would not have any impact.

New Developments

1. STORMWATER AND EROSION AND SEDIMENT CONTROL

Any new construction project involving earth disturbance of one acre or greater is required to obtain an NPDES Permit for Discharges of Stormwater Associated with Construction Activities, regardless of the designated use of the stream. This involves two primary requirements. First, applicants must develop and implement an Erosion and Sediment Control Plan (E&S Plan) sufficient to control sediment runoff from the site during active construction. Second, the applicant must develop and implement a Post-Construction Stormwater Management Plan to manage peak rate, volume and quality of stormwater from the site after construction is completed.

E&S Plans in HQ and EV watersheds must include Special Protection Best Management Practices (BMPs) that may not necessarily be required in watersheds that are not HQ or EV. These Special Protection BMPs include:

- Special design requirements for sediment basins.
- Lining all channels, collectors and diversions with permanent

vegetation, rock, geotextile or other nonerosive materials.

- Designing BMPs for peak discharge from 5-year frequency storm.
- Immediate stabilization of the site upon completion or temporary cessation of earth disturbance.
- Alternative BMPs to maintain and protect existing water quality if approved by DEP or County Conservation District.³

Post-Construction Stormwater Management Plans in HQ and EV watersheds must undergo the antidegradation review described in detail on page 3. This review is not required for stormwater discharges in non-Special Protection watersheds. For stormwater discharges, nondischarge alternatives that may be evaluated and used include low impact development designs to minimize disturbance of natural soils and vegetation and use of stormwater management techniques that infiltrate stormwater back into the ground. ABACT technologies that may be employed include infiltration BMPs (such as grassed infiltration swales, porous pavement and bioretention facilities) and BMPs that provide additional water quality treatment (such as water quality filters and catch basin inserts).

DEP has issued a general NPDES permit for stormwater discharges, and proposed discharges into non-HQ/EV waters are eligible for coverage under this general permit. However, proposed



Development

discharges to HQ or EV waters must obtain an individual NPDES permit.

Minor earth disturbances of less than one acre do not require an NPDES Stormwater Permit. This is true regardless of whether the stormwater discharge is in HQ, EV or non-HQ/EV waters, and thus HQ/EV designation has no impact in this respect.

While exempt from NPDES permit require-

ments, earth disturbances of less than one acre but greater than 5,000 square feet do, however, still require the development and implementation of a written E&S Plan.⁴ Once again, this is true regardless of the receiving water's designated use,

so HQ/EV designation has no impact. HQ/EV designation may potentially impact very small earth disturbances (equal to or less than 5,000 square feet) in that an E&S Plan is required if the earth disturbance, because of its proximity to existing drainage features and patterns, has the potential to discharge to HQ or EV waters. In all other circumstances involving minor earth disturbances of this size, a written E&S Plan is not required, though E&S BMPs must still be implemented.⁵

All E&S Plans in HQ or EV watersheds, regardless of the size of the earth disturbance, are expected to include Special Protection BMPs described on page 6.⁶

2. WETLANDS AND STREAM ENCROACHMENTS

If a proposed development involves disturbance of or encroachment into wetlands, streams or other bodies of water, an Encroachment Permit may be required.

HQ status and impact on Encroachment

Permits. HQ status does not alter any of the permit review processes for stream Encroachment Permits. In addition, all activities related to proposed development that would be eligible for coverage under a general permit (utility line stream crossings, minor road crossings, temporary road crossings) may still use a general permit in HQ watersheds.

EV status and impact on Encroachment Per-



mits. EV status does impact permitting of Encroachment Permits in several respects.

First, with respect to proposed encroachment in wetlands, if the wetland is located in the floodplain of an EV stream or its tributary, the wetland is consid-

ered an EV wetland.⁷ More stringent requirements apply to proposed encroachments in EV wetlands. For example, the project for which the encroachment is needed must be "water dependent," meaning that project requires access or proximity to or siting within the wetland to fulfill the basic purposes of the project.⁸ Docks and marinas are good examples of "water dependent" projects.

It is important to note that only those wetlands in the floodplain of EV streams and their tributaries are considered EV wetlands. All other wetlands within an EV watershed that are located outside of the floodplain and that do not meet one or more of the other EV wetland criteria are considered "other" wetlands and are not subject to the more stringent EV wetland permitting requirements.

In addition, the wetlands in the floodplain of wild trout streams and their tributaries are considered EV wetlands. Thus if your stream is a wild trout stream or a tributary of a wild trout stream, an upgrade to EV status will not have any effect on wetlands in its floodplain because they already are being regulated as EV wetlands.

Second, with respect to proposed encroachment in streams, if the stream is EV, DEP will not issue the permit unless the applicant demonstrates the project will not have an adverse impact on public natural resources.⁹ This requirement is more stringent than what is required for non-EV streams. For non-EV streams, a permit can be issued if DEP determines that the public benefits of the project outweigh the environmental harm.¹⁰

Third, ford crossings for private property, normally exempt from encroachment permitting, must obtain an individual permit if crossing an EV stream.¹¹

Fourth, general permits for utility line stream crossings, minor road crossings and temporary road crossings are not applicable in EV streams. Rather, individual permits are required.

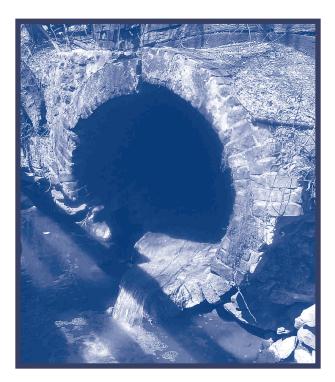
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

Municipalities that are considered large, medium or small Municipal Separate Storm Sewer Systems (MS4s) must obtain MS4 NPDES permits for their municipal stormwater systems. The only large and medium MS4s in Pennsylvania are the cities of Philadelphia, Pittsburgh and Allentown. Small MS4s are those that fall within "urbanized areas" as defined by the 2000 Census.

MS4 NPDES permits require regulated municipalities to comply with the following minimum control measures regarding stormwater:

- Public education and outreach.
- Public participation and involvement.
- Illicit discharge detection and elimination.
- Construction site runoff control.
- Post-construction runoff control.
- Pollution prevention and good housekeeping.

For municipalities in non-HQ or non-EV watersheds, an MS4 NPDES general permit (PAG-13) is available. Municipalities in HQ or EV watersheds must obtain an individual MS4 NPDES permit. The individual MS4 NPDES permit does not include any additional substantive permit



conditions or obligations upon the permitted municipality beyond the six minimum control measures listed above. Developers proposing discharges of construction and post construction stormwater, however, must undergo **antidegradation review** of their NPDES construction permits as described in detail on page 3.

SEWAGE

Existing Sewage Facilities

A change in designated use to HQ or EV status will not effect existing sewage treatment plants, small flow treatment systems and on lot systems. Existing systems are allowed to continue to operate under all existing applicable permits and approvals. Permits may also be renewed without any additional requirements resulting from HQ/EV redesignation, as long as systems are not expanded and discharges increased.

New or Expanding Sewage Facilities

1. WASTEWATER TREATMENT FACILITIES New or expanded wastewater treatment facilities that propose new, additional or increased discharges to HQ or EV waters must undergo the **antidegradation review** described in detail on page 3. Nondischarge alternatives that may be evaluated and used in the sewage disposal context include land application of effluent using spray or drip irrigation systems.

Facilities that do not qualify as small flow treatment systems must obtain individual NPDES permits regardless of HQ/EV status, thus redesignation has no effect in this respect.

2. SMALL FLOW TREATMENT SYSTEMS

Small Flow Treatment Systems are those that treat wastewater and discharge less than 2000 gallons per day.¹² A general NPDES permit is available for Small Flow Treatment Systems that discharge to non-HQ and non-EV waters. Individual permits are required, however, for proposed discharges to HQ and EV waters. In addition, **antidegradation review** of such discharges is required.

3. ON LOT SYSTEMS

Use of on lot systems are unaffected by HQ or EV status. On lot systems do not propose new



or increased discharges to streams. The permitting of such systems would undergo normal site and soils analysis set forth in DEP's sewage regulations.

The only possible effect of HQ or EV status with respect to on lot systems relates to a municipality's duty to revise its Act 537 (Sewage Facilities) Plan to accommodate new development that proposes use of on lot systems. If such development is in an HQ or EV watershed, an Act 537 Plan revision is always required.¹³ For non-HQ/EV streams, an Act 537 revision may or may not be required depending on other factors.

State Funding for Sewage Treatment Projects

HQ or EV designation has a positive effect on potential state funding for sewage treatment projects from the Clean Water State Revolving Fund. Projects seeking such funding that are located in HQ or EV watersheds receive a higher priority ranking for funding.¹⁴

Agriculture

Winter Application of Manure

All farms that apply manure to fields must follow new regulations for winter application of manure. EV redesignation may affect winter application of manure in one minor respect. Winter manure may not be mechanically applied within 100 feet of wetlands that meet all of the following:

- Are identified on National Wetlands Inventory Maps.
- Are within the 100-year floodplain of an EV stream; and
- Surface flow is toward the wetland.¹⁵

For all other wetlands, there is no winter manure application setback.

Small Farms

Existing or new small farming operations are not subject to any environmental permitting regulations, regardless of the designated use of the watershed in which the farm is lo-

cated. With the exception of the winter application of manure near EV wetlands discussed above, which applies to all farms regardless of size, small farms are not impacted by HQ or EV designation.

Existing Regulated Operations (CAOs and CAFOs)

Certain environmental regulations apply to larger farming operations, categorized as Concentrated Animal Operations (CAOs) or Concentrated Animal Feeding Operations (CAFOs). These include requirements to obtain Nutrient Management Plans, CAFO NPDES Permits, and Water Quality Management Permits. In all but one respect, a change in designated use to HQ or EV status will not affect existing CAOs and CAFOs, as they will be permitted to continue to operate under all existing applicable permits and plans. Permits may also be renewed without any additional requirements as a result of the redesignation to HQ or EV, as long as operations are not expanded.



The one situation in which HQ or EV redesignation may affect existing CAOs and CAFOs relates to Nutrient Management Plan requirements. New regulations effective October 1, 2006 require Nutrient Management Plans to manage phosphorus. The regulations contain a provision that phases in phosphorus requirements for facilities existing on or before October 1, 2006 over a four-year period. This phase in period is not available where the nearest downgradient stream is HQ or EV.¹⁶ In those cases, existing facilities will have to meet the new phosphorus requirements when their Nutrient Management Plans are renewed, which is every three years.

New or Expanding Regulated Operations (CAOs and CAFOs)

New or expanding CAOs and CAFOs must develop and implement Nutrient Management Plans regardless of the designated use of the

watershed in which the farm is located. EV status may have one minor effect on new CAOs and CAFOs covered under the Nutrient Management Regulations and other operations that voluntarily develop Nutrient Management Plans. For such operations, manure storage facilities (except reception pits and transfer pipes) may not be constructed within 100 feet of wetlands that meet all of the following:

- Are identified on National Wetlands Inventory Maps.
- Are within the 100-year floodplain of an EV stream; and
- Surface flow is toward the wetland.¹⁷

A Water Quality Management (Part II) Permit is required for new or expanded liquid or semisolid manure storage facilities over 2.5 million gallons regardless of the designated use of nearby streams. For such facilities that are ponds with capacity between 1 and 2.5 million gallons, a permit is required if the nearest downgradient stream is HQ or EV.¹⁸ Permits are not required if ponds of this size are in non-HQ/EV watersheds. A **CAFO NPDES Permit** is required for large activities that disturb 5,000 square feet or more of land must develop and implement a written E&S Plan. Activities that are less than 5,000 square feet need not develop a written plan but must

farming operations known as CAFOs. All new or expanded CAFOs must obtain CAFO NPDES permits regardless of the designated use of the watershed in which they are located. The general CAFO NPDES permit is not available, however, for CAFOs in HQ or EV watersheds. Rather, an individual permit is required.

Plowing and Tilling Activities

HQ or EV status has no effect

on plowing or tilling activities. Regardless of the designated use of the watershed in which a farm is located, any agricultural plowing or tilling Activities that are less than 5,000 square not develop a written plan but must implement E&S BMPs.¹⁹ The Special Protection BMPs de-

Special Protection BMPs described on page 6 do not apply to agricultural plowing or tilling.

Use of Pesticides and Herbicides

Use of pesticides, including herbicides, is not affected by HQ or EV status. Pesticide use in Pennsylvania is regulated by the Pennsylvania Department of Agriculture pursuant to its authority under the Pesticide Control Act²⁰

and the pesticide regulations.²¹ Neither the Act nor the regulations set forth any special restrictions on the use of pesticides in HQ or EV watersheds.

LOGGING

Logging operations are regulated under DEP's Erosion and Sediment Control Regulations. Regardless of the size of timber harvest operations, all operations in HQ or EV watersheds must implement the Special Protection E&S BMPs described on page 6.

With the exception of the requirement to implement Special Protection E&S BMPs, HQ or EV status has little to no impact on logging. All timber harvest activities involving 25 acres or more must obtain an Erosion and Sediment Control Permit, regardless of the status or designated use of the watershed.²² Timber harvest activities less than 25 acres but greater than 5,000 square feet need not obtain a permit, but must develop and implement E&S Plans to control erosion and sedimentation, again regardless of designated use.²³

HQ/EV designation may potentially impact very small timber harvest operations (equal to or less than 5,000 square feet) in that an E&S Plan is required if the earth disturbance, because of its proximity to existing drainage features and patterns, has the potential to discharge to HQ or EV waters.²⁴ In all other circumstances involving minor timber harvesting of this size, a written E&S Plan is not required, though E&S BMPs must still be implemented.²⁵



ROAD BUILDING AND MAINTENANCE

Building new roads, bridges and stream crossings

The building of new roads will require the same types of permits and authorizations that are required for other land development activities (E&S Plan, Stormwater NPDES Permit, Encroachment Permits for stream and wetland encroachments and crossings, including bridge and culvert construction). In HQ or EV watersheds, the Special Protection E&S BMPs described on page 6 must be implemented and applications for Stormwater NPDES Permits will undergo the **antidegradation review** described in detail on page 3.

As discussed above, HQ status does not impact Encroachment Permit procedures. The special considerations regarding stream and wetland encroachments in EV watersheds are the same as outlined on page 7.

Road maintenance

Road maintenance activities such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities are regulated under DEP's Erosion and Sediment Control Regulations. As with logging, road maintenance activities in all watersheds involving 25 acres or more must obtain an Erosion and Sediment Control Permit, regardless of the designated use of the watershed. Activities less than 25 acres but greater than 5,000 square feet must develop and implement E&S Plans, again regardless of designated use. For small activities less than 5,000 square feet, an E&S Plan is only required for activities that have the potential to discharge to HQ or EV streams.²⁶

Regardless of the size of the activity, the Special Protection E&S BMPs must be implemented in HQ and EV watersheds.²⁷

Winter maintenance

DEP permits or authorizations are not required for a municipality to use salt, de-icers, cinders or sand for winter maintenance of roads regardless of designated use. Thus HQ or EV status will not have an effect on these activities and the use of these materials.

Bridge and culvert maintenance, repair and replacement

Bridge and culvert maintenance, repair and replacement are authorized by DEP under a general encroachment permit. Activities in HQ and EV watershed are also authorized by the general permit, and thus redesignation of streams to HQ or EV status will not have any effect on these activities.

Dirt and gravel road maintenance

Redesignation of streams to HQ or EV status can be of benefit when it comes to funding for the Dirt and Gravel Road Maintenance Program. The State Conservation Commission, which administers the program, considers the number of miles of HQ or EV streams protected as of 1996 in apportioning funds to participating County Conservation Districts.²⁸

Dams

Existing Dams

Existing dams are grandfathered with respect to all environmental permitting and approvals, and thus EV or HQ status would not have any impact.

New Dams

Except as discussed below, new dams are required to obtain an individual permit regardless of designated use, thus redesignation of streams to HQ or EV will have no impact.

Some dams are exempt from the requirement to obtain a permit. These include small dams not exceeding three feet in height on non-wild trout streams not exceeding 50 feet in width, and certain dams subject to the requirements of the Mine Safety and Health Administration.²⁹ EV designation will affect such dams, as DEP must undertake an



environmental assessment of dam proposals on EV streams.³⁰ This environment assessment review is not required for dams on HQ and non-Special Protection streams.

Docks and Boat Ramps



Existing Docks and Boat Ramps

Existing docks and boat ramps are grandfathered with respect to all environmental permitting and approvals, and thus EV or HQ status would not have any impact.

New Docks and Boat Ramps

In order to build a new dock or boat ramp or expand an existing one, an encroachment permit is required. Coverage under a general permit is sufficient for all waters except EV waters. An individual permit is needed to construct a dock or boat ramp in EV waters.

Mining

Coal and Non-Coal Mining Operations

Existing surface or underground coal mining and non-coal operations (such as quarries) are grandfathered with respect to environmental permits and approvals, thus redesignation to HQ or EV status has no effect.

New or expanding operations must obtain mining permits that also include NPDES permits for discharges of wastewater associated with the mining operations. Review of the NPDES permits for discharges to HQ or EV waters must undergo the **antidegradation review** described in detail on page 3.

Coal Refuse Disposal Facilities

Existing coal refuse disposal facilities are grandfathered with respect to all environmental permitting and approvals, and thus EV or HQ status would not have any impact.

While HQ status does not affect the siting or permitting of new or expanding coal refuse disposal facilities, EV status does. New facilities cannot be sited in EV watersheds, unless that watershed is a "preferred site" (roughly defined as a watershed or site affected by unreclaimed mining areas, including acid mine drainage).³²

WASTE MANAGEMENT FACILITIES

Existing Facilities

Existing waste management facilities are grandfathered with respect to all environmental permitting and approvals, and thus EV or HQ status would not have any impact.

New or Expanding Facilities

1.MUNICIPAL OR RESIDUAL WASTE DISPOSAL FACILITIES

The impact of HQ or EV status on new municipal or residual waste disposal facilities is minimal. All proposed new facilities and expansions must obtain a waste management permit from DEP. Presence in an HQ or EV watershed is not a bar to siting such a facility, but it is a factor that is to be considered when conducting the requisite environmental assessment portion of the permit review.³²

2. LOW LEVEL RADIOACTIVE WASTE DISPOSAL FACILITIES

All such sites must be permitted by DEP. Low level radioactive waste disposal facilities may not be sited in EV watersheds.³³ HQ status is not a bar to permitting, but DEP must evaluate and determine

a proposed site's impact on HQ watersheds that may be affected. $^{\rm 34}$

3. HAZARDOUS WASTE TREATMENT AND DISPOSAL FACILITIES

All such sites must be permitted by DEP. Facilities may not be sited in EV watersheds.³⁵ In addition,

if a petition to upgrade a stream to EV status is pending, the hazardous waste facility applicant must submit information and



analysis to allow DEP to assess the impact of the proposed facility on the pending designation.³⁶

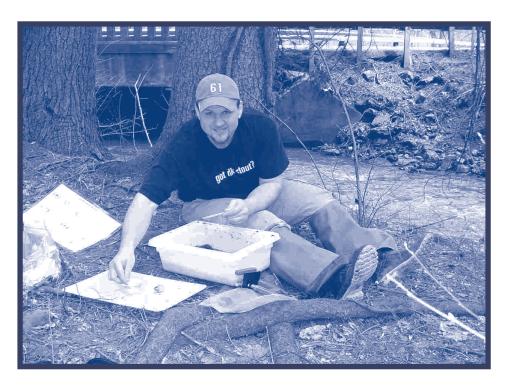
4. ABOVE GROUND STORAGE TANKS

The impact of HQ or EV status on the siting of above ground storage tanks is minimal. Large above ground storage tanks require site specific permits. Applicants for site specific permits must conduct an environmental assessment, of which presence in an HQ or EV watershed is one of the factors that must be considered.³⁷

STREAM RESTORATION PROJECTS

Stream restoration projects are not affected by HQ or EV status. Some small projects can be undertaken pursuant to a general encroachment permit (including installation of fish enhancement structures, minimal bank rehabilitation and abandoned mine reclamation). Applicable general permits can still be used for projects in HQ or EV waters, with the exception of gravel bar removal in EV streams, which requires an individual permit.

Larger scale restoration projects (i.e., greater than 500 linear feet) will require an individual encroachment permit regardless of the designated use of the stream.







Effects of High Quality (HQ) Designation

Existing Developments, Sewage Treatment Plants, Docks, Waste Facilities:	Existing facilities are grandfathered; no changes are required unless expansion is proposed after HQ status is granted
New Developments:	
 Erosion & Sedimentation Control Plan 	E&S plan required if there is potential to discharge to HQ stream; Special Protection BMPs required
 Post-construction Stormwater Management Plans 	Antidegradation Review required (SEJ Allowed); Individual permit required for any new stormwater discharge
Wetlands & Stream Encroachments	No change in permit review process; general permits still allowed
New Sewage Facilities:	
 New/expanded treatment facilities 	Antidegradation Review required (SEJ allowed)
 Small Flow treatment systems 	Individual permit required/antidegradation review required
On Lot systems	No impact
 State Funding for sewage projects 	Location in HQ watershed gives project higher priority for funding
Farming:	
Small Farms	No impact
 Existing CAOs and CAFOs 	Four-year phase-in for phosphorus in Nutrient Management Plans not applicable
 Manure Storage facilities 	Water Quality Management permit always required for facilitie over 2.5 million gallons; in HQ waters, facilities over 1 million gallons also require Water Quality Management permit
Pesticide use	No impact
Plowing or tilling	No impact
Logging:	E&S plan required if there is potential to discharge to HQ stream; Special Protection BMPs required in E&S plan

Effects of High Quality (HQ) Designation (cont.)

Road Construction & Maintenance:

Considered during permitting but does not prevent siting new facility	
Considered during permitting but does not prevent siting new facility	
Considered during permitting but does not prevent siting new facility	
Considered during permitting but does not prevent siting new facility	
Considered during permitting but does not prevent siting new facility	
No impact	
Existing facilities are grandfathered; new or expanding operation require antidegradation review (SEJ allowed)	
No impact	
No impact	
HQ status can help secure funds	
No impact; general permits allowed	
No impact	
E&S plan required if there is potential to discharge to HQ stream; Special Protection BMPs required in E&S plan	
Stormwater permits require antidegradation review (SEJ allowed); Special Protection BMPs required in E&S plan	

Effects of Exceptional Value (EV) Designation

Existing Developments, Sewage Treatment Plants, Docks, Waste Facilities:	Existing facilities are grandfathered; no changes are required unless expansion is proposed after EV status is granted
New Developments:	
Erosion & Sedimentation Control Plan	E&S plan required if there is potential to discharge to EV stream; Special Protection BMPs required
Post-Construction Stormwater Management Plans	Antidegradation Review required (no water quality degradation allowed). Individual permit required for any new stormwater discharge
Wetlands & Stream Encroachments	Wetlands in floodplain of EV stream are "EV wetlands" and get special protection. Encroachments in EV streams cannot have adverse effect on public natural resources. Ford crossings of EV streams must get individual permit. Utility line stream crossings and minor and temporary road stream crossings of EV streams must get individual permit.
New Sewage Facilities:	
 New/expanded treatment facilities 	Antidegradation Review required (no water quality degradation allowed)
Small Flow treatment systems	Individual permit required/antidegradation review required
On Lot systems	No impact
 State Funding for sewage projects 	Location in EV watershed gives project higher priority for funding
Farming:	
Small Farms	No impact except winter application of manure.
• Existing CAOs and CAFOs	Four-year phase-in for phosphorus in Nutrient Management Plans not applicable
New CAFOs	Must obtain individual NPDES permit, not general permit
Manure Storage facilities	Water Quality Management permit always required for facilities over 2.5 million gallons; in EV waters, facilities over 1 million gallons also require Water Quality Management permit; 100 foot setback required from some EV wetlands
Pesticide & herbicide use	No impact
Plowing or tilling	No impact
Winter application of manure	100 foot setback required from some EV wetlands

Effects of Exceptional Value (EV) Designation (cont.)

Logging:	E&S plan required if there is potential to discharge to EV stream; Special Protection BMPs required in E&S plan	
Road Construction & Maintenance:		
 New road construction 	Stormwater permits require antidegradation review; Special Protection BMPs required in E&S plan	
Maintenance	E&S plan required if there is potential to discharge to EV stream; Special Protection BMPs required in E&S plan	
Winter maintenance/salting	No impact	
Bridge & culvert repair or maintenance	No impact; general permits allowed	
Dirt road maintenance	EV status can help secure funds	
Dams, Docks, Boat Ramps:		
New dams	Environmental assessment required in EV watersheds	
New docks and boat ramps	Individual permit required in EV watersheds	
Mining:		
Mining Operations	Existing facilities are grandfathered; new or expanding operation require antidegradation review	
New coal refuse facilities	May not be sited in EV watersheds unless "preferred site"	
Waste Management Facilities/Landfills:		
 New municipal waste disposal facilities 	Considered during permitting but does not prevent siting new facility	
 New residual waste disposal facilities 	Considered during permitting but does not prevent siting new facility	
 New low level radioactive waste disposal facilities 	May not be sited in EV watersheds	
 New hazardous waste treatment/ disposal facility 	May not be sited in EV watersheds	
 New above ground storage tanks 	Considered during permitting but does not prevent siting new facility	
Stream Restoration Projects:	Gravel bar removal requires individual permit	

Endnotes

¹ 25 Pa. Code §§ 93.4a-93.4d.	²⁰ 3 P.S. § 111.21 <i>et seq</i> .
² 25 Pa. Code § 93.4c(b)(1).	²¹ 7 Pa. Code §§ 128.1-128.112.
³ 25 Pa. Code § 102.4(b)(6).	²² 25 Pa. Code § 102.5(b).
⁴ 25 Pa. Code § 102.4(b).	²³ 25 Pa. Code § 102.4(b)(2).
⁵ 25 Pa. Code § 102.4(b)(1).	²⁴ 25 Pa. Code § 102.4(b)(2).
⁶ 25 Pa. Code § 102.4(b)(6).	²⁵ 25 Pa. Code § 102.4(b)(1).
⁷ 25 Pa. Code § 105.17(1)(iii).	²⁶ 25 Pa. Code §§ 102.5(b), 102.4(b)(1).
⁸ 25 Pa. Code § 105.18a(a).	²⁷ 25 Pa. Code § 102.4(b)(6).
⁹ 25 Pa. Code § 105.16(c)(4).	²⁸ 25 Pa. Code § 83.604(c)(2).
¹⁰ 25 Pa. Code § 105.16(a), (b).	²⁹ 25 Pa. Code § 105.12.
¹¹ 25 Pa. Code § 105.12(a)(9).	³⁰ 25 Pa. Code § 105.15(a)(3).
¹² 25 Pa. Code § 73.1.	³¹ 25 Pa. Code §§ 90.201, 90.202(e)(2).
¹³ 25 Pa. Code § 71.51(b)(1).	³² 25 Pa. Code §§ 271.127(a), 287.127(a).
¹⁴ 25 Pa. Code § 103.7.	³³ 25 Pa. Code § 236.128(a)(ix).
¹⁵ 25 Pa. Code § 83.294(g).	³⁴ 25 Pa. Code § 236.128(b)(2).
¹⁶ 25 Pa. Code § 83.293(c)(4).	³⁵ 25 Pa. Code § 269a.29.
¹⁷ 25 Pa. Code § 83.351(a)(2)(v), (vi).	³⁶ 25 Pa. Code § 269a.50(b)(13).
¹⁸ 25 Pa. Code § 91.36(a)(4).	³⁷ 25 Pa. Code § 245.235.
¹⁹ 25 Pa. Code § 102.4(a).	

PHOTO CREDITS:

Cover: Lackawaxen River, an HQ Designated River. Photo courtesy of Delaware Riverkeeper Network. *Back Cover:* Photo by T.J. Gobreski, courtesy of Clean Water Fund.

Page 2: Photo by T.J. Gobreski, courtesy of Clean Water Fund.

- *Page 4:* Maya K. van Rossum, the Delaware Riverkeeper, taking a benthic survey on Angelica Creek, Berks County. Photo courtesy of Delaware Riverkeeper Network.
- Page 5: Wissahickon Creek in Philadelphia. Photo by T.J. Gobreski, courtesy of Clean Water Fund.
- Page 6: Chester County construction site in close proximity to Ridley Creek, an EV stream. Photos courtesy of Delaware Riverkeeper Network.
- Page 7: Formerly farmland in Delaware County. Photo courtesy of Delaware Riverkeeper Network.

Page 8: Photo courtesy of Clean Water Fund.

Page 9: Combined Sewer Overflow into Darby Creek. Photo courtesy of Delaware Riverkeeper Network.

Page 10: Photo courtesy of Chesapeake Bay Foundation.

Page 11: Agriculture stream before and after revitalization. 'Before' photo courtesy of Brian Vadino, Wildland Conservancy; 'After' photo courtesy of R. Biolsi, Delaware Riverkeeper Network.

Page 13: Photos courtesy of Chesapeake Bay Foundation.

Page 14: Photo courtesy of Clean Water Fund.

Page 15: Top: Ryan Zerbe taking a benthic survey on Angelica Creek, Berks County. Photo courtesy of Delaware Riverkeeper Network. Bottom Left: Saplings at Awbury Arboretum. Photo by D. Williams, courtesy of Delaware Riverkeeper Network. Bottom Right: Dave and Dan preparing restoration work along Tinicum Creek, Bucks County. Photo by Faith Zerbe, courtesy of Delaware Riverkeeper Network.



THE EFFECTS OF Special Protection Designation **A Guide for Communities**

Produced by the Pennsylvania Campaign for Clean Water February 2007