

Narrative Water Quality Standards: ***Where We've Been, Where We Are Going and How We Get There***



Mine Drainage Task Force Symposium

Jason Bostic

West Virginia Coal Association

March 27, 2012

Overview

- How We Got Here (prelude)
- Where We've Been
- Narrative Standards
(What Do they Really Mean)
- How We Get to Where We Need to Be

Prelude

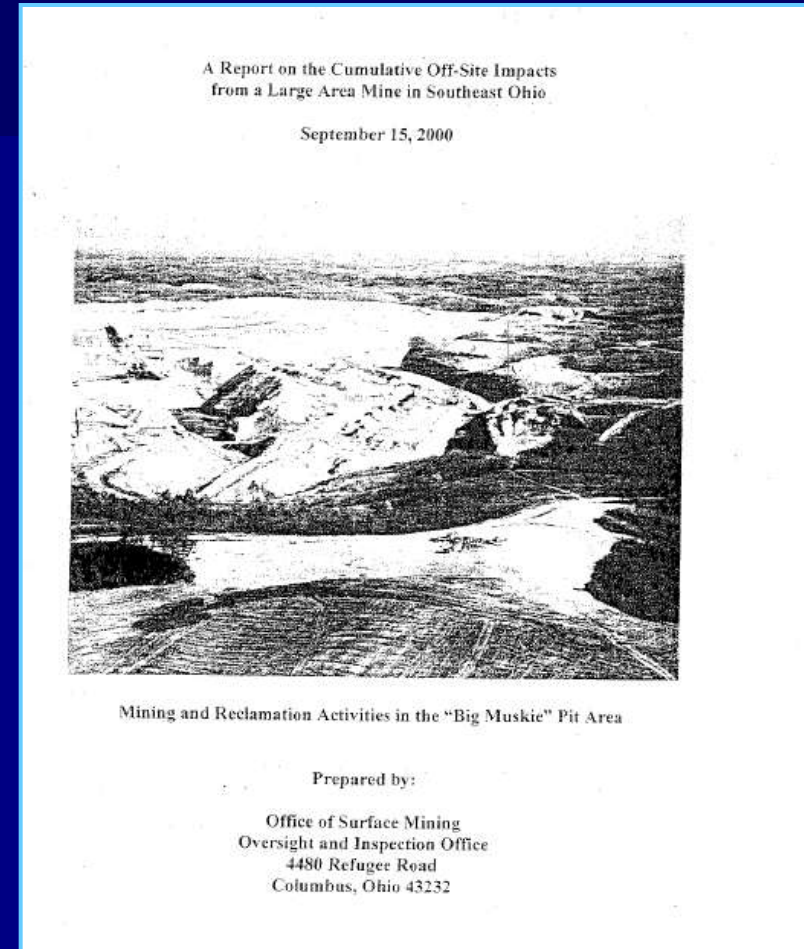
- EPA Region III “Study” (late 2008)
- “Groundbreaking” NEW Science
- Clear and convincing evidence of “devastating” impacts of mountaintop mining
- Objections start on January 20, 2009 (and never stop)
- Only Concerned About Surface Mines with Valley Fills



YOUR MIND
Is Being Messed With

What's Really Going On

- What new information?
- “shift” in the benthic community
- Same federal government in 2001:
“Mining activities are not causing or contributing to significant degradation of waters of the United States.”



“EPA’s position... is stunning power for an agency to arrogate to itself when there is absolutely no mention of it in the statute.”

W.Va. Narrative Standard

No sewage, industrial wastes or other wastes present in any waters of the state shall cause or materially contribute to any of the following conditions thereof:

* * * *

3.2.e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life.

* * * *

3.2.i. Any other condition ... which adversely alters the integrity of waters of the State including wetlands; no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

EPA & West Virginia's Narrative Standard



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

20 JAN 2009

The results of our Freshwater Biology Team's study indicate that the severity of the biological impairment rises to the level of a violation of water quality standards (WQS) when States or USEPA use biological data to interpret narrative standards. For example, in West Virginia, the narrative WQS reads, "... no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed".

Thank you for opportunity to provide comments for this proposed project. In summary, EPA believes that this proposal will contribute to a violation of the State's water quality standards downstream and that the direct and cumulative impacts from this and future mines and possible development associated with the King Coal Highway will be persistent and permanent and can not be sufficiently or effectively compensated through the proposed mitigation, therefore EPA must recommend denial of the permit as proposed. A thorough analysis of the impacts and their effects on the watershed are warranted.

EPA vs. Corps



DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

SEP 30 2009

Reply to
Attention of:

Operations and Readiness Division
Regulatory Branch
199800436-3

While USEPA desires the USACE to revisit water quality issues, compliance with water quality standards is the province of the WVDEP's "certification" process undertaken pursuant to Section 401 of the CWA. 33 U.S.C. § 1341(a). That certification is binding on the USACE. See 33 C.F.R. § 320.4(d); see also OVEC v. Aracoma, 556 F.3d 177, 208 (4th Cir. 2009) ("A § 401 certification is considered conclusive, and no independent analysis of the certification is required."). In the 2008 joint Mitigation Rule, the USACE and USEPA addressed a comment that the rule did not provide sufficient guidance to ensure that the USACE will protect water quality. The agencies jointly responded that "[w]ater quality standards are more appropriately addressed under section 401 of the CWA." 73 Fed. Reg., 19594, 19627 (10 April 2008). Additionally, the USACE is aware of other studies that have resulted in different conclusions that those in the Pond Study. These studies include:

Sincerely,

A handwritten signature in black ink, appearing to read "Robert D. Peterson", written over a horizontal line.

Robert D. Peterson
Colonel, Corps of Engineers
District Engineer

**If Narrative
Standard is
NOT What EPA
Says it is,
THEN WHAT IS
IT?**





- Legislative Hearings—
2010 Regular Session
- **House Concurrent
Resolution No. 111**
- **Introduced and
Passed by BOTH
houses in TWO days**

House Concurrent Resolution 111

HOUSE CONCURRENT RESOLUTION NO. 111

(By Delegates Butcher, Cann, Givens, Manchin and Shott)

[Introduced March 10, 2010.]

Whereas, West Virginia's narrative standards must be implemented and interpreted in a manner that is protective of aquatic communities consistent with the Legislature's statement of public policy and applicable laws; and

Whereas, The State of West Virginia has not adopted subcategories of special use to protect a certain species of mayfly but protects the aquatic community consistent with the Legislature's statement of public policy; and

HOUSE CONCURRENT RESOLUTION NO. 111

(By Delegates Butcher, Cann, Givens, Manchin and Shott)

[Introduced March 10, 2010.]

therefore, be it

Resolved by the Legislature of West Virginia:

That any interpretation and implementation of West Virginia's narrative water quality standards is the responsibility of the West Virginia Department of Environmental Protection; and, be it

Further Resolved, That the requirements of the narrative criteria are met, when a stream (a) supports a balanced aquatic community that is diverse in species composition; and (b) contains appropriate trophic levels of fish (in streams with sufficient flows to support fish populations); and (c) the aquatic community is not composed only of pollution tolerant species, or the aquatic community is composed of benthic invertebrate assemblages sufficient to perform the biological functions necessary to support fish communities within the assessed reach (or, if the assessed reach has insufficient flows to support a fish community, in those downstream reaches where fish are present); and, be it

**Environmental Protection Agency:
Guidance on Appalachian Surface Coal Mine Permitting Under
the Clean Water Act and National Environmental Policy Act**

April 1, 2010



Release Date: August 12, 2010



west virginia department of environmental protection

**Permitting Guidance for Surface Coal Mining Operations to Protect
West Virginia's Narrative Water Quality Standards,
47 C.S.R. 2 §§ 3.2.e and 3.2.i**

INTRODUCTION

The purpose of this Permitting Guidance ("Guidance") is to assist West Virginia Department of Environmental Protection ("DEP") permit writers in developing site-specific National Pollutant Discharge Elimination System ("NPDES") permit conditions for surface coal mining operations using a holistic watershed management approach through the use of biological and chemical monitoring, whole effluent toxicity ("WET") testing, and the development of Aquatic Ecosystem Protection Plans ("AEPP") and, where necessary, Adaptive Management Plans ("AMP") to protect the State's narrative water quality standards. These standards are found in West Virginia's *Code of State Rules*, which states, in pertinent part, "No significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed."¹ These new procedures shall take effect immediately.²

This Guidance does not apply to outlets that are primarily precipitation induced, or for which the activities associated with those outlets have been substantially completed.³

REASONABLE POTENTIAL ANALYSIS

In deciding which permit conditions to include in a permit, the first thing a permit writer must do is perform a reasonable potential analysis and document the same in the Statement of Basis for the permit. If the applicant cannot demonstrate, by means of its chemical and biological monitoring and the control measures outlined in its AEPP, that it does not have reasonable potential ("RP") to cause or contribute to an excursion above the narrative criteria, the permit writer should treat new or expanded discharges as if they have RP and include WET limits in the permit, in accordance with 40 C.F.R. § 122.44(d)(1)(v).

At permit reissuance, DEP will use all valid and representative data to determine, on a case-by-case basis, whether an existing discharge causes, has the reasonable potential to cause, or contributes to an excursion from the narrative water quality criteria. Where DEP concludes that an existing outlet has RP, the permit will include WET limits. In cases where insufficient data is available to make a determination of RP upon permit reissuance, the permit writer will place WET monitoring requirements and triggers in the permit in order to determine RP (or lack of

¹ 47 C.S.R. 2 § 3.2.i

² In light of the changing nature of the policy concerns addressed herein, this document is intended to be dynamic and will likely be modified in the future as technology and best management practices develop and improve.

³ The term "substantially complete" shall mean that the operation is past the point when measures that could be undertaken under either an AEPP or an AMP could be effective in reducing the operation's impact on the aquatic ecosystem.

**1/20/09
Inauguration
day**

**First EPA
objection
letters on
404 permits**

**3/10/10
W.Va. Legislature
Passes
H.C.R. 111**

**8/18/10
WV DEP
Narrative
Guidance
Issued**

**7/13/11
House Passes
H.R. 2018**

**3/10/12
W.Va. Legislature
Passes
S.B. 562**

**6/11/09
MOU
& ECP**

**4/1/10
EPA Issues
Conductivity
Manifesto**

**10/6/10
WV
sues
EPA**

**10/6/11
ECP is
dead**

Justification / Background

- Goal of the Narrative Standard is to protect the aquatic ecosystem as a whole.
- “Aquatic ecosystem” is a dynamic complex of plants, animals and microorganisms interacting as a functional unit.
- Narrative Standard serves to protect the aquatic ecosystem- it is a holistic standard requires a holistic assessment.

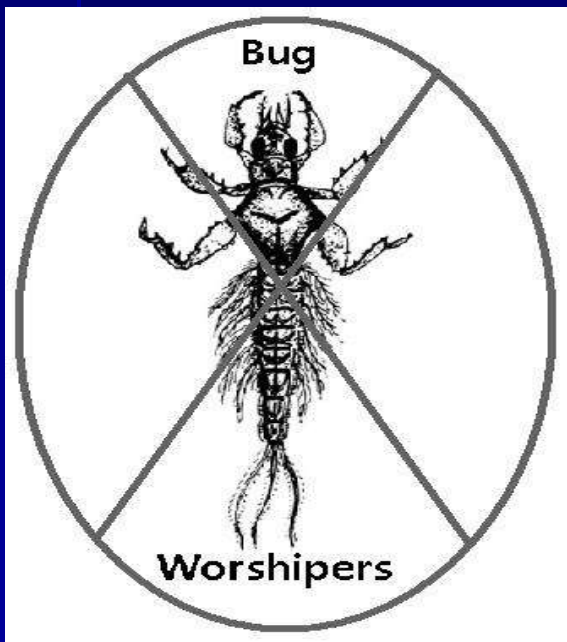
Justification / Background

Narrative Standard is inclusive and holistic:

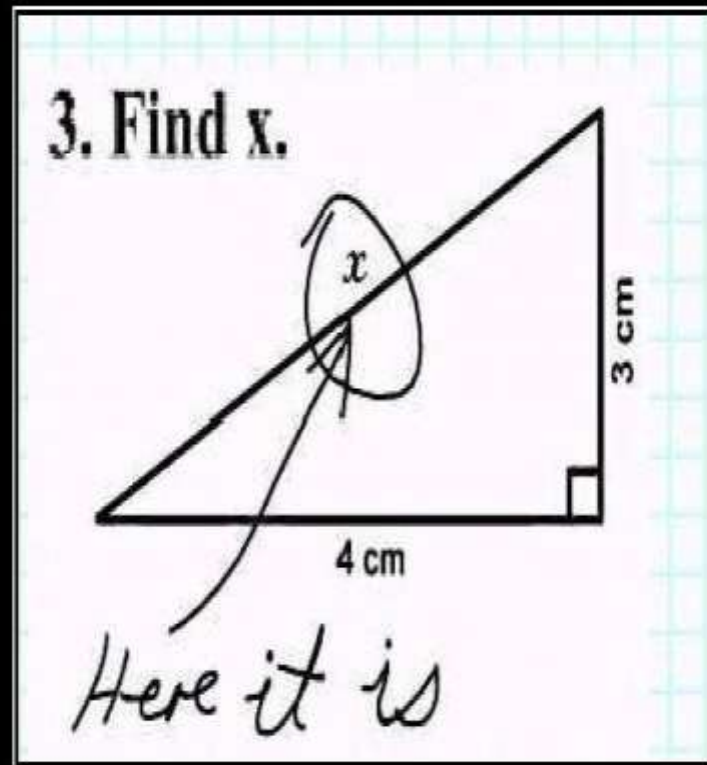
- Aquatic ecosystem does not exist at a single point.
- Compliance with the Narrative cannot be based on assessments of a single point, or single parameter.

But What About the WV SCI?

Whereas, The State of West Virginia has not adopted subcategories of special use to protect a certain species of mayfly but protects the aquatic community consistent with the Legislature's statement of public policy; and



Narrative Implementation Policy

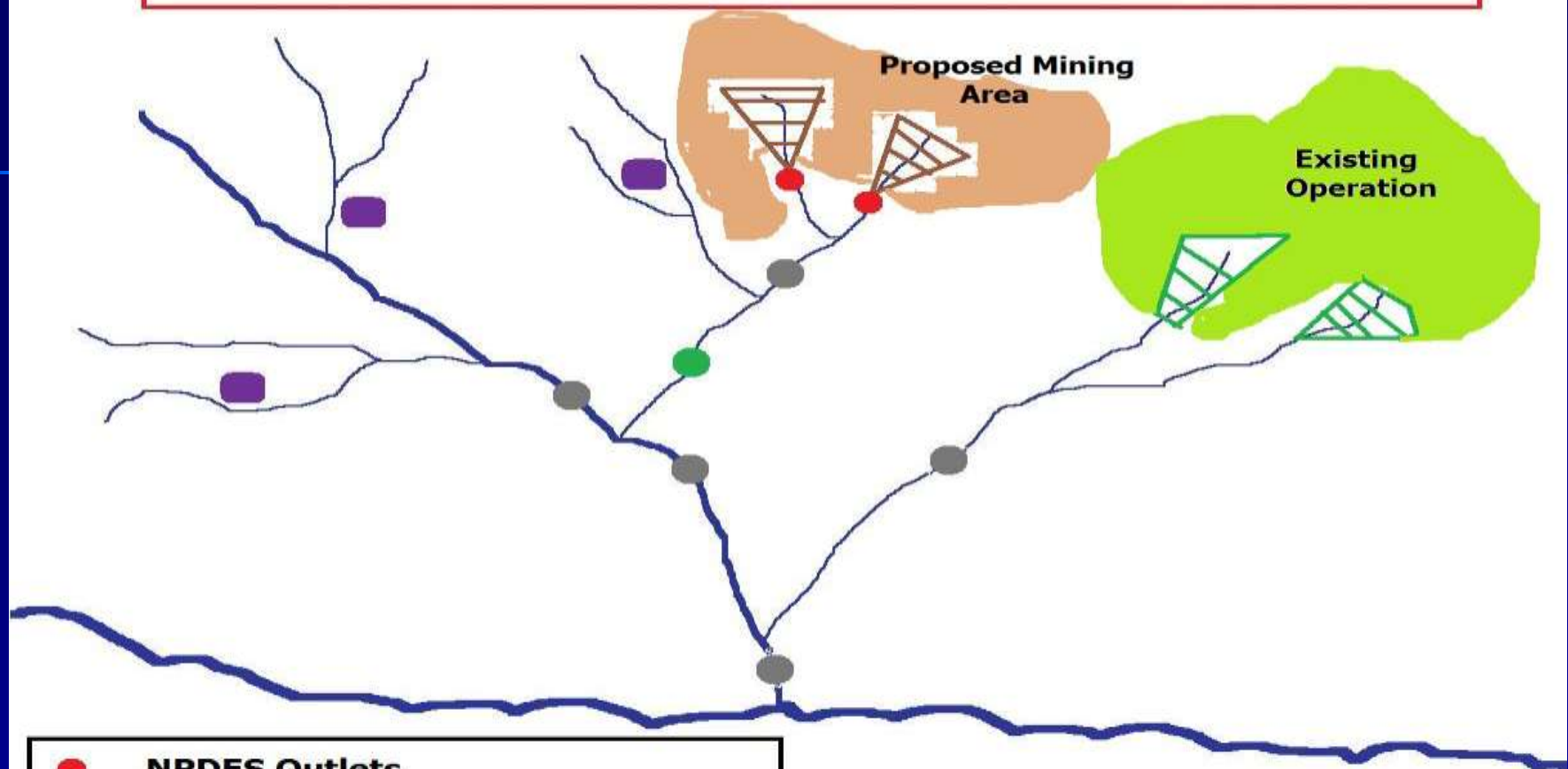


SIMPLICITY

- Complicated
- Monitoring Intensive
- WET Testing
- Lots of Room for Mistakes

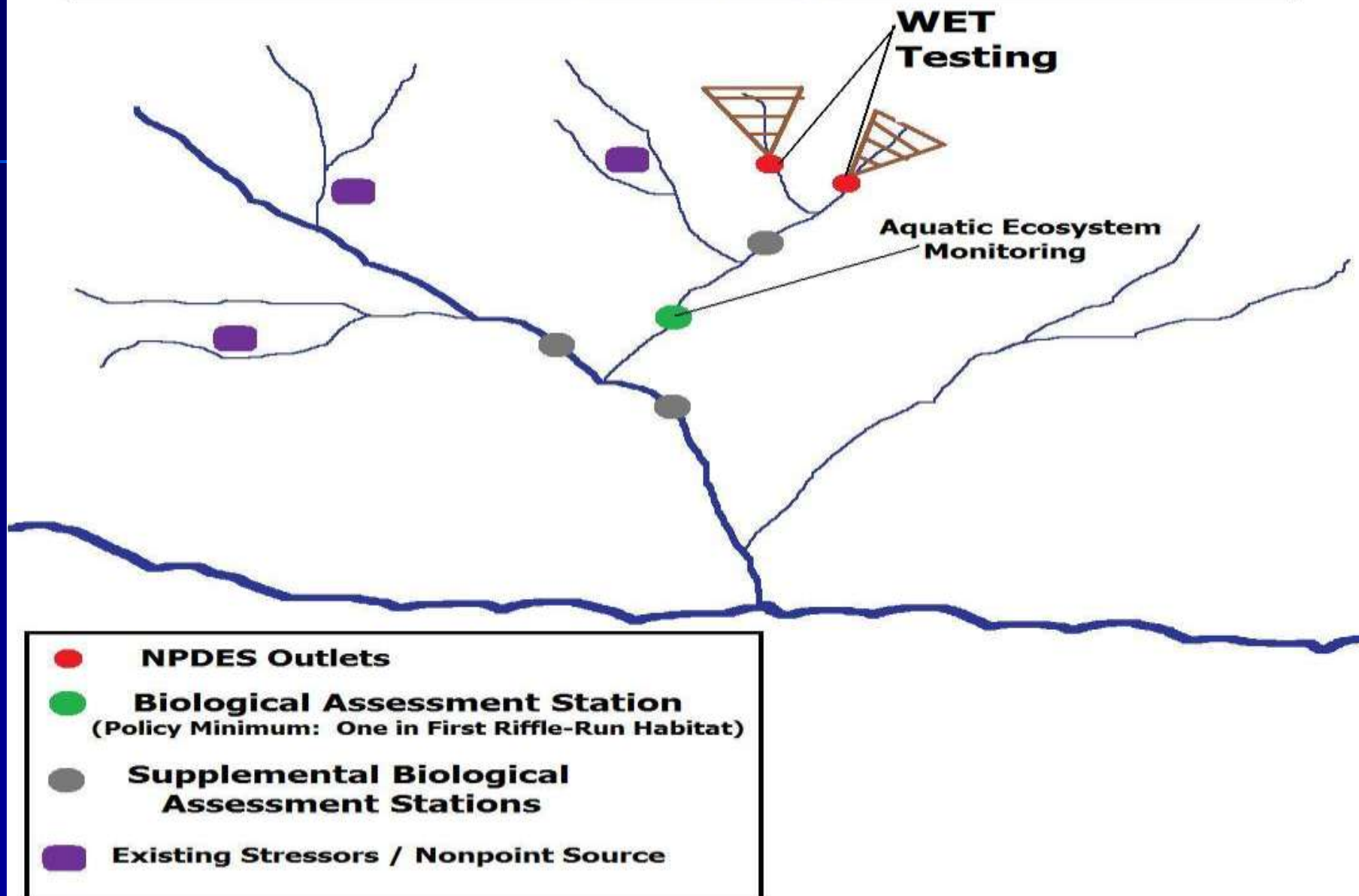
A E P P

Reasonable Potential Analysis

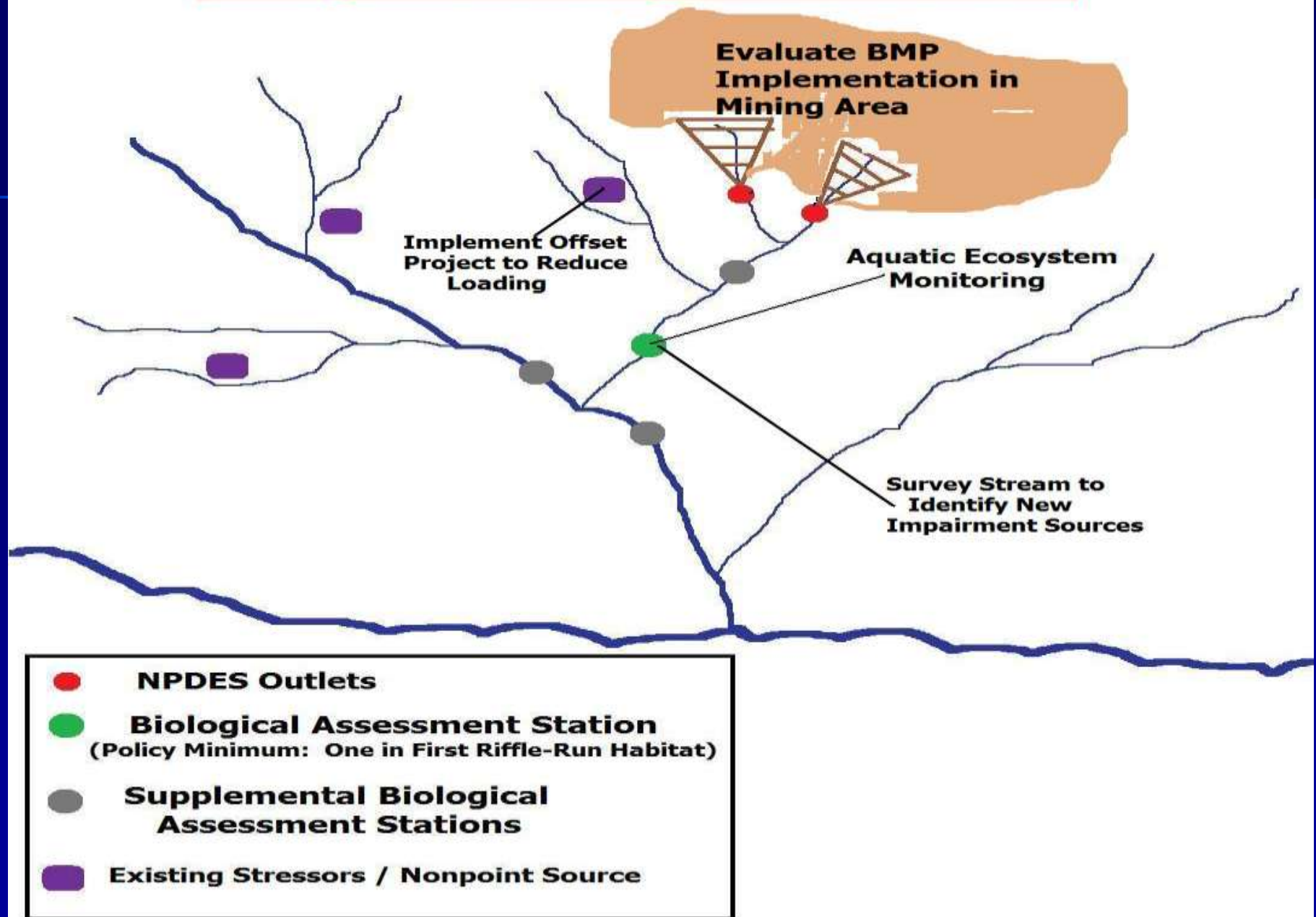


- **NPDES Outlets**
- **Biological Assessment Station**
(Policy Minimum: One in First Riffle-Run Habitat)
- **Supplemental Biological Assessment Stations**
- **Existing Stressors / Nonpoint Source**

New & Expanded Discharge Compliance Monitoring (RP Exists)



Adaptive Management Plans



And yet, Nothing Seemed to Change!!!



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

Attachment "F"

MAY 14 2010

Mr. Jeffrey Parsons
West Virginia Department of Environmental Protection
Division of Mining & Reclamation
601 57th Street SE
Charleston, WV 25304

Re: WV NPDES No. WV1004247 - Reissuance
Rockhouse Creek Dev Mine No. 5
Deep Mine - SMCRA No. U500887
EPA Receipt Date - April 14, 2010

Dear Mr. Parsons:

Pursuant to Section 402 of the Clean Water Act, 40 CFR Parts 123.44, the *Memorandum of Agreement Regarding the Administration and Enforcement of the National Pollutant Discharge Elimination System (NPDES) in West Virginia (1982)* (MOA), the U.S. Environmental Protection Agency (EPA) Region III received the draft permit cited above concerning the reissuance of an existing NPDES permit. Based on our review, we consider that this submittal is incomplete; therefore we are issuing an interim objection to reissuance of this permit. EPA's 30 day review under the MOA will begin once we have a complete submittal.

The NPDES application for the Rockhouse Creek Dev contains specific conductivity and sulfate at outfall 002 at levels potentially associated with biological impairment, greater than 500 umhos for specific conductivity and greater than 202 mg/l for sulfate. The specific conductivity reported at outfall 002 is 1267 umhos and the sulfate level is 618.6 mg/l. The documentation provided to EPA did not include a reasonable potential analysis or an antidegradation analysis to determine whether specific conductivity and sulfates discharges have a reasonable potential to cause or contribute to an excursion of the state narrative water quality criteria as required in 40 CFR § 122.44 (d)(1)(vi). We consider this information necessary for EPA to determine whether the permit is consistent with the guidelines and requirements of the CWA and NPDES regulations as described in 40 CFR § 123.44(d)(2). We request that WVDEP undertake this analysis and determine appropriate water quality-based effluent limits to be included in the permit. The state should conduct a reasonable potential analysis for conductivity and sulfate to assess compliance with the state narrative water quality criteria.

In light of the foregoing, we also request that instream monitoring be required to evaluate at a minimum for total dissolved solids, specific conductivity and sulfates. We have discussed

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

RANDY C. HUFFMAN, in his official capacity as CABINET SECRETARY OF THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and acting on behalf of the STATE OF WEST VIRGINIA,

Plaintiffs,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; LISA P. JACKSON, in her official capacity as ADMINISTRATOR, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY; UNITED STATES ARMY CORPS OF ENGINEERS; JOHN M. MCHUGH, in his official capacity as SECRETARY OF THE ARMY; LIEUTENANT GENERAL ROBERT L. VAN ANTWERP, in his official capacity as UNITED STATES ARMY CHIEF OF ENGINEERS AND COMMANDING GENERAL OF THE UNITED STATES ARMY CORPS OF ENGINEERS,

Defendants.

Civil Case No. _____

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

I. Introduction

1. Plaintiff Randy C. Huffman, in his official capacity as Cabinet Secretary of the West Virginia Department of Environmental Protection ("WVDEP"), and acting on behalf of the State of West Virginia (sometimes referred to as "West Virginia" or the "State," and together with WVDEP, the "Plaintiff"), brings this complaint for declaratory and injunctive relief against defendants United States Environmental

112TH CONGRESS
1ST SESSION

H. R. 2018

IN THE SENATE OF THE UNITED STATES

JULY 14, 2011

Received; read the first time

JULY 18, 2011

Read the second time and placed on the calendar

AN ACT

To amend the Federal Water Pollution Control Act to preserve the authority of each State to make determinations relating to the State's water quality standards, and for other purposes.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*

1/20/09
Inauguration
day

First EPA
objection
letters on
404 permits

3/10/10
W.Va. Legislature
Passes
H.C.R. 111

8/18/10
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4/1/10
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Conductivity
Manifesto

10/6/10
WV
sues
EPA

10/6/11
ECP is
dead

How We Get Where We Need to Be

COMMITTEE SUBSTITUTE
FOR
Senate Bill No. 562

(By Senators Kessler (Mr. President), Beach, D. Facemire, Fanning, Hall, Helmick,
Prezioso, Plymale and Klempa)

[Originating in the Committee on Natural Resources;

reported February 15, 2012.]

A BILL to amend and reenact §22-11-7b of the Code of West Virginia, 1931, as amended, relating to establishing a public policy for narrative water quality standards; establishing a procedure to determine compliance with the biologic component of the narrative water quality standard; clarifying rule-making authority.

- Senate Bill 562
 - Codifies Legislative Intent re: Narrative Water Standards Interpretation and Implementation (HCR 111)

(f) The secretary shall propose rules measuring compliance with the biologic component of West Virginia's narrative water quality standard requires evaluation of the holistic health of the aquatic ecosystem and a determination that the stream: (i) Supports a balanced aquatic community that is diverse in species composition; (ii) contains appropriate trophic levels of fish, in streams that have flows sufficient to support fish populations; and (iii) the aquatic community is composed of benthic invertebrate assemblages sufficient to perform the biological functions necessary to support fish communities within the assessed reach, or, if the assessed reach has insufficient flows to support a fish community, in those downstream reaches where fish are present. The

ENROLLED
COMMITTEE SUBSTITUTE
FOR
Senate Bill No. 562

(SENATORS KESSLER (MR. PRESIDENT), BEACH, D. FACEMIRE, FANNING, HALL,

HELMICK, PREZIOSO, PLYMALE AND KLEMPA, *original sponsors*)

[Passed March 10, 2012; in effect from passage.]

Yeas: Barnes, Beach, Boley, Browning, Chafin, Edgell, Facemire D., Facemyer K., Fanning, Foster, Green, Hall, Helmick, Jenkins, Kirkendoll, Klempa, Laird, McCabe, Miller, Minard, Nohe, Palumbo, Plymale, Prezioso, Snyder, Stollings, Sypolt, Tucker, Unger, Wells, Williams, Wills, Yost and Kessler (Mr. President)--34.

Nays: None.

Absent: None.

WEST VIRGINIA HOUSE OF DELEGATES

2012 FIRST REGULAR SESSION

SB 562

**Establishing DEP procedure for
biologic component compliance of
narrative water quality standard**

**RCS# 453
3/10/2012
10:41 PM**

PASSAGE

YEAS : 94

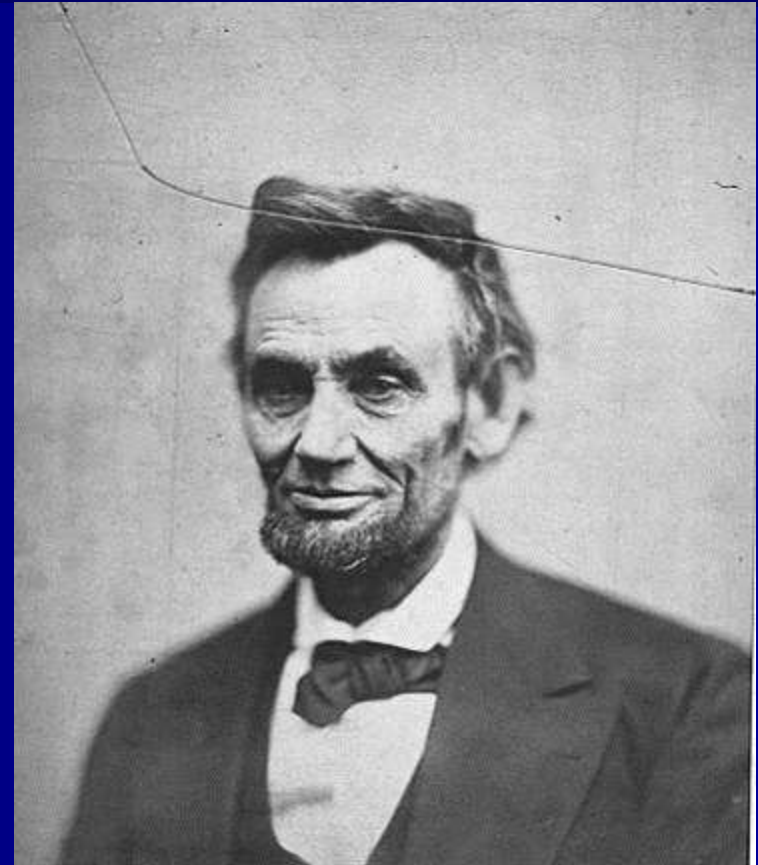
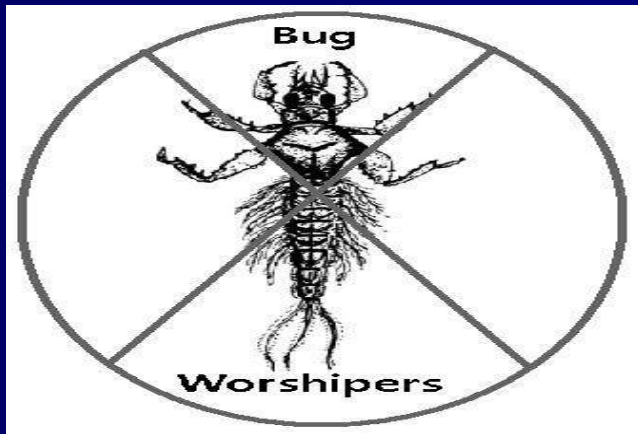
NAYS : 6

NOT VOTING : 0

PASSED

Senate Bill 562

!The Legislature Has Spoken!



"Let every American...swear never to violate in the least particular the laws of the country, and never to tolerate their violation by others."

We Can Overcome

- Know Our Guidance
- Implement Our Program
- Control Our Own Destiny

