

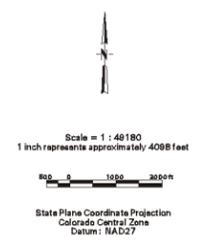
FIGURES

Figure 1
Major Drainage Basins at Rocky Flats

EXPLANATION

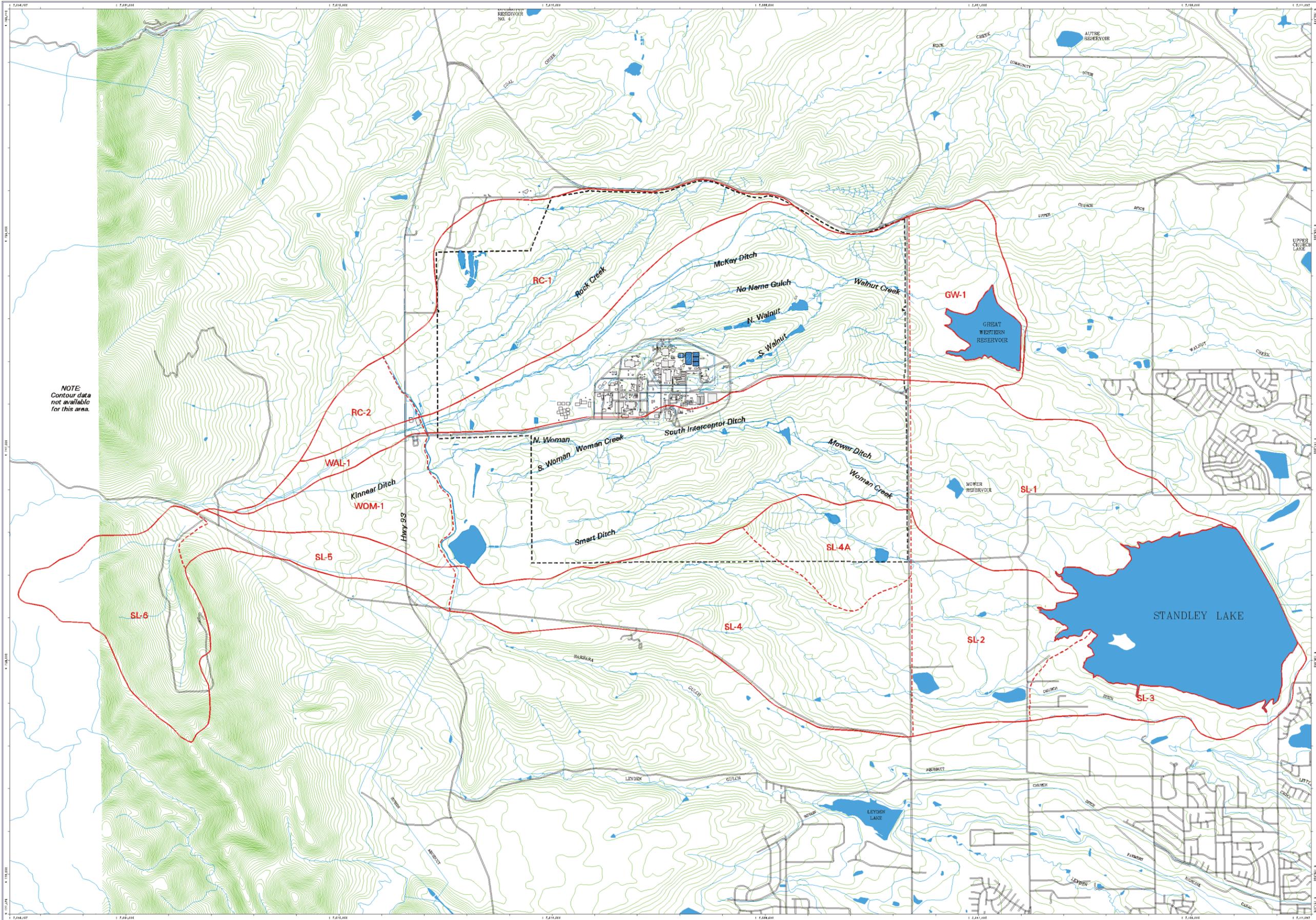
-  Major Drainage Basin Boundary
-  Sub-Basin Boundary
- Areas of Sub-basins**
- Rock Creek 1 - 1662.9 Acres
- Rock Creek 2 - 219.5 Acres
- Walnut Creek 1 - 143.2 Acres
- Woman Creek 1 - 563.7 Acres
- Great Western 1 - 594.0 Acres
- Standley Lake 1 - 1537.2 Acres
- Standley Lake 2 - 939.4 Acres
- Standley Lake 3 - 428.8 Acres
- Standley Lake 4 - 1806.3 Acres
- Standley Lake 4A - 528.4 Acres
- Standley Lake 5 - 380.7 Acres
- Standley Lake 6 - 912.2 Acres
- Standard Map Features**
-  Buildings and other structures
-  Solar Evaporation Ponds (SEP)
-  Lakes and ponds
-  Streams, ditches, or other drainage features
-  Rocky Flats boundary

DATA SOURCE BASE FEATURES:
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by ECH O RSL, Las Vegas. Digitized from the orthophotographs, 1/95
 Data Source:
 Drainage Basin data - Approved by Mr. Chirameo (RMR-5, 303-966-4535).



U.S. Department of Energy
 Rocky Flats Environmental Technology Site

Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01



NOTE:
 Contour data
 not available
 for this area.

Figure 2. Schematic Diagram of the AME Erosion, Sediment and Actinide Transport Modeling Process

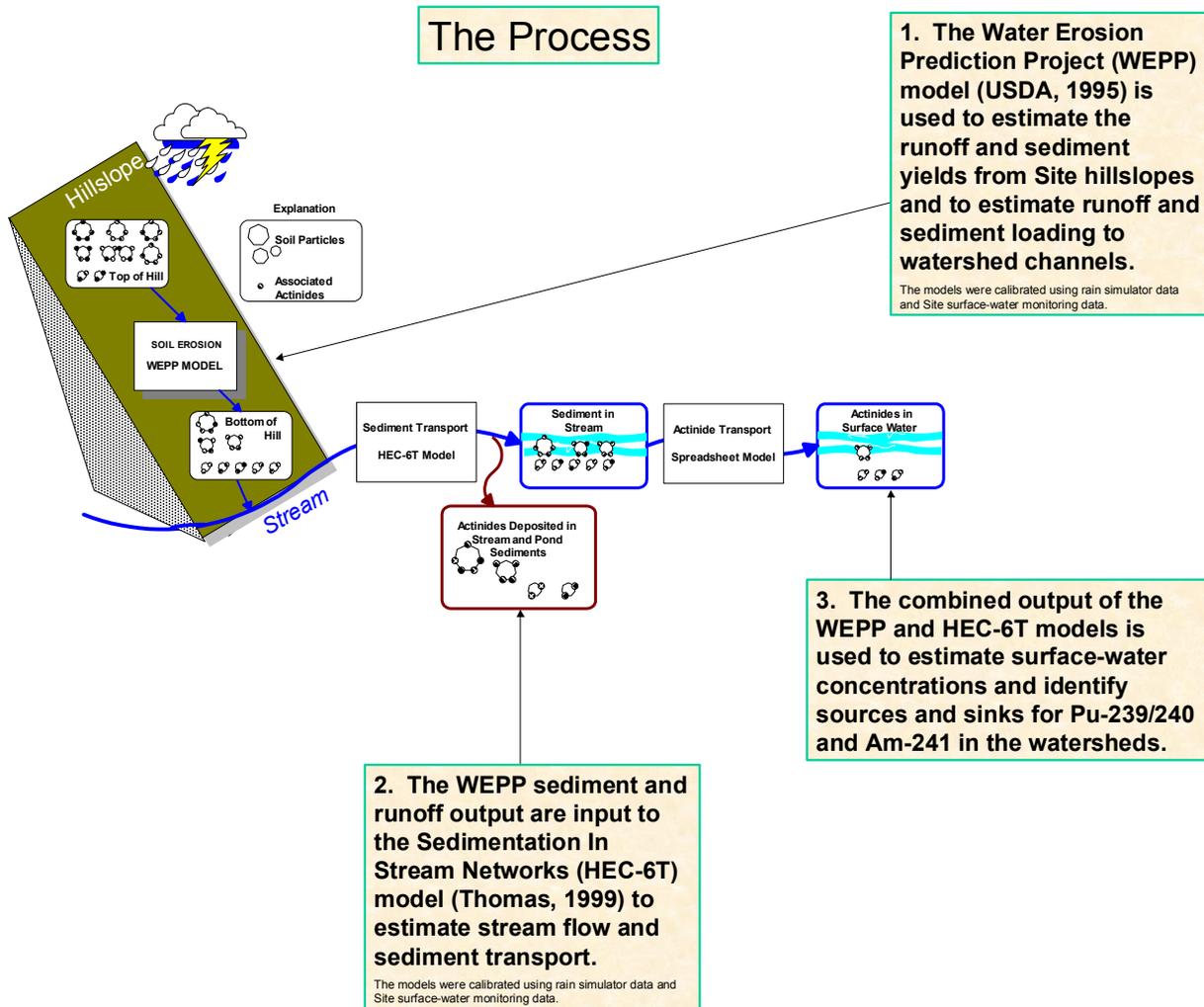


Figure 3
Automated Surface
Water Monitoring
Locations and
Precipitation Gages for
FY 2001
EXPLANATION

- ⊕ Precipitation Gage
- Monitoring Location Objective***
- Buffer Zone Hydrologic
- New Source Detection
- ▲ Point of Compliance
- ▲ Point of Evaluation
- Source Location
- ▲ Ad Hoc
- Performance
- IDLH**
- Standard Map Features**
- Buildings and other structures
- ▨ Solar Evaporation Ponds (SEP)
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences and other barriers
- Contour (20-Foot)
- - - Rocky Flats boundary
- Paved roads

DATA SOURCE BASE FEATURES:
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95. Topology (contours) were derived from digital elevation model (DEM) data by Morrison Knudsen (MK) using ESRI Arc TIN and LATTICE to process the DEM data to create 5-foot contours. The DEM data was captured by the Remote Sensing Lab, Las Vegas, NV, 1994 Aerial Flyover at 10 meter resolution. DEM post-processing performed by MK, Winter 1997.

NOTE:
 * The monitoring objective(s) performed at each location are detailed in the Surface Water Section of the Site Integrated Monitoring Plan.
 ** IDLH (Immediate Danger to Life & Health) refers to the monitoring objective for safe operation of the Site detention ponds.



Scale = 1 : 17870
 1 inch represents approximately 1488 feet



State Plane Coordinate Projection
 Colorado Central Zone
 Datum: NAD27

U.S. Department of Energy
 Rocky Flats Environmental Technology Site

Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01

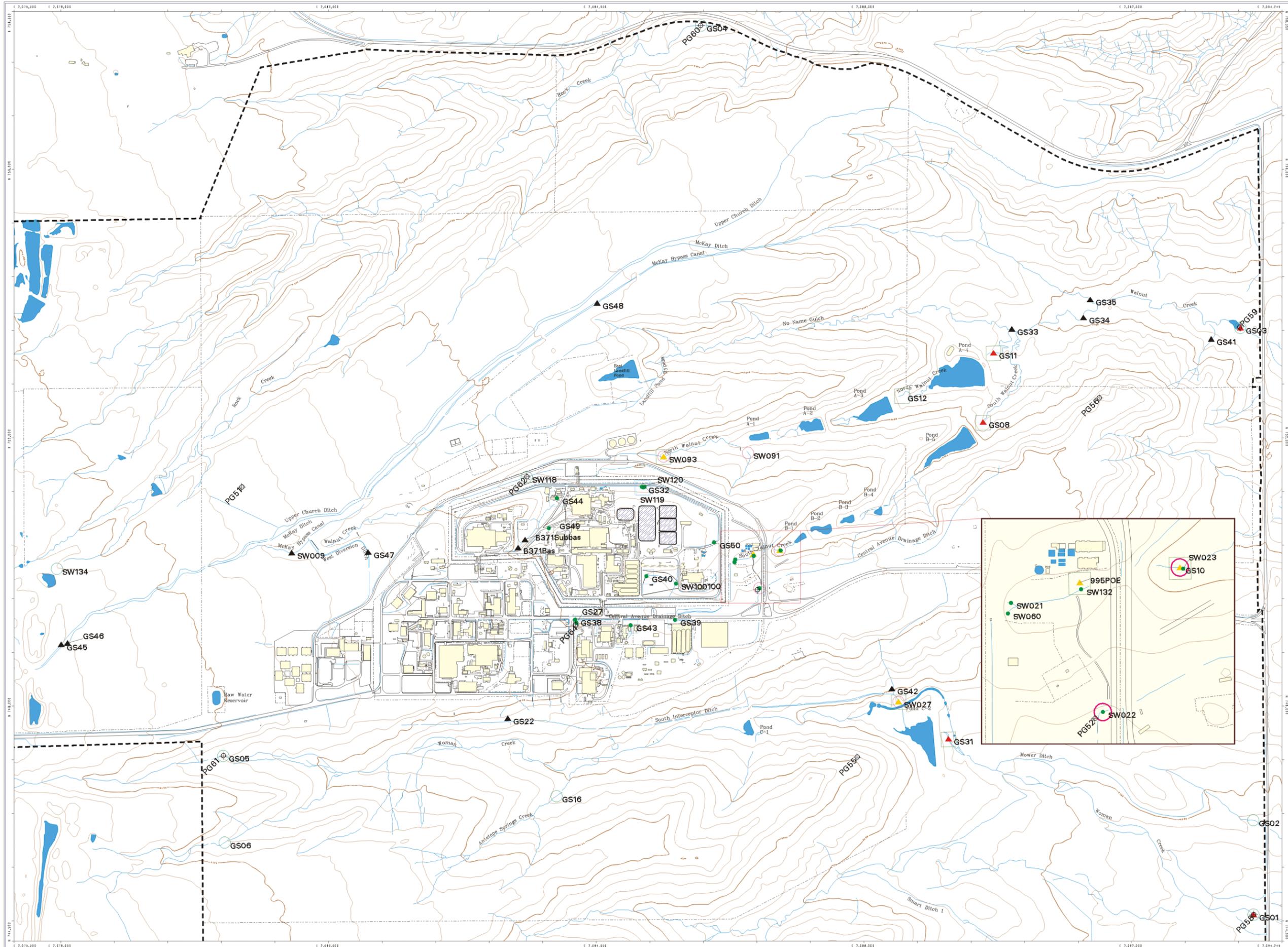


Figure 4

All Watershed Hillslopes

EXPLANATION

- Hillslope Boundaries**
- Woman Creek Watershed Hillslopes
 - South Interceptor Ditch Hillslopes
 - Walnut Creek Watershed Hillslopes

- Standard Map Features**
- Buildings and other structures
 - Solar Evaporation Ponds (SEP)
 - Lakes and ponds
 - Streams, ditches, or other drainage features
 - Fences and other barriers
 - Contour (20-Foot)
 - Rocky Flats boundary
 - Paved roads
 - Dirt roads

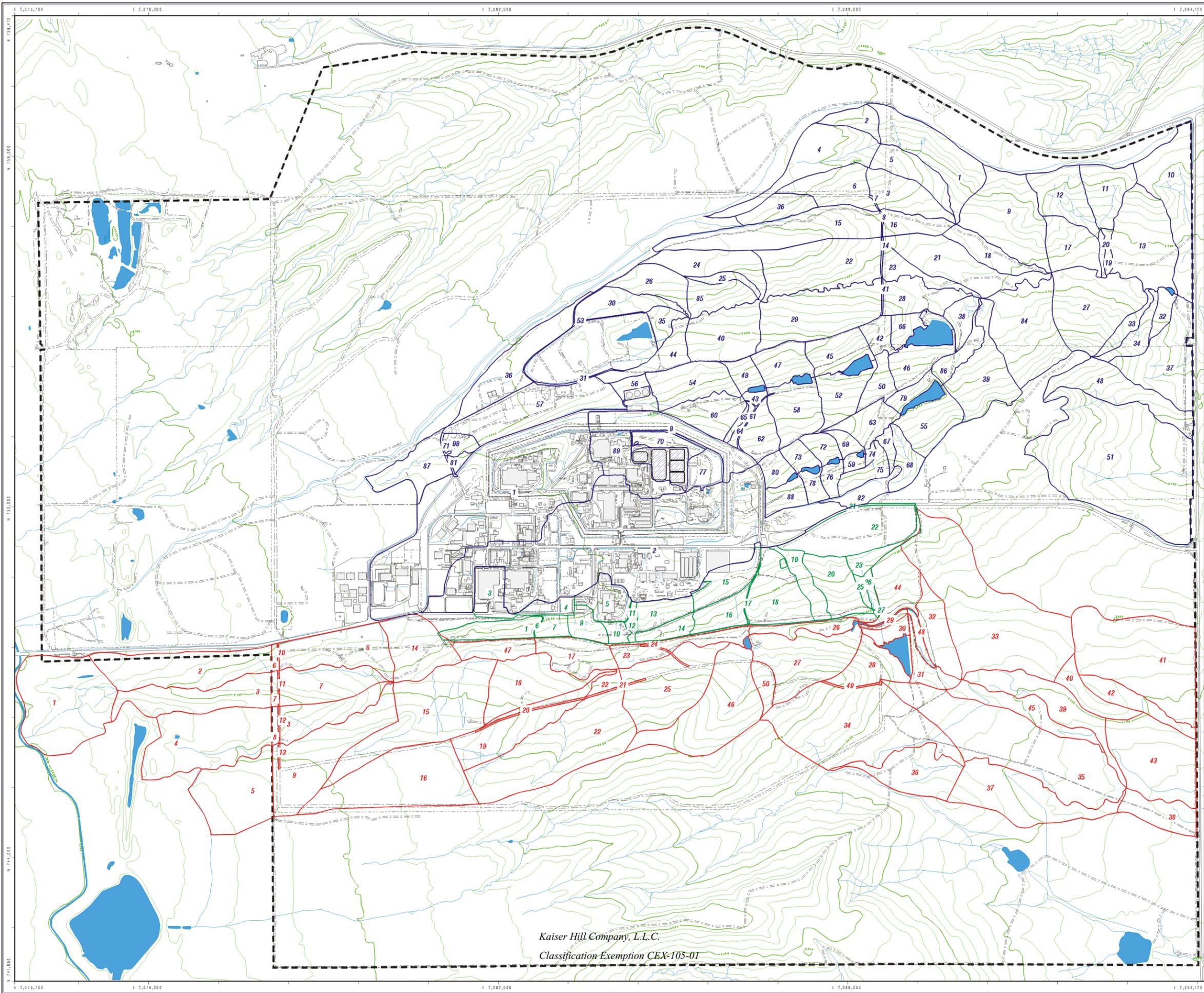
DATA SOURCE:
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs. 1/95 Topology (contours) were derived from digital elevation model (DEM) data by Morrison Knudsen (MK) using ESRI Arc TIN and LATICE to process the DEM data to create 5-foot contours. The DEM data was captured by the Remote Sensing Lab, Las Vegas, NV, 1994 Aerial Flyover at ~10 meter resolution. DEM post-processing performed by MK, Winter 1997.

Scale = 1 : 21330
 1 inch represents approximately 1778 feet

 State Plane Coordinate Projection
 Colorado Central Zone
 Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Rocky Mountain Remediation Services, L.L.C.
 Geographic Information Systems Group
 Rocky Flats Environmental Technology Site
 P.O. Box 464
 Golden, CO 80402-0464



Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01

Figure 5. Comparison of HEC-6T Cross Section Geometry for a Typical Rip Rap Drop Structure On the SID

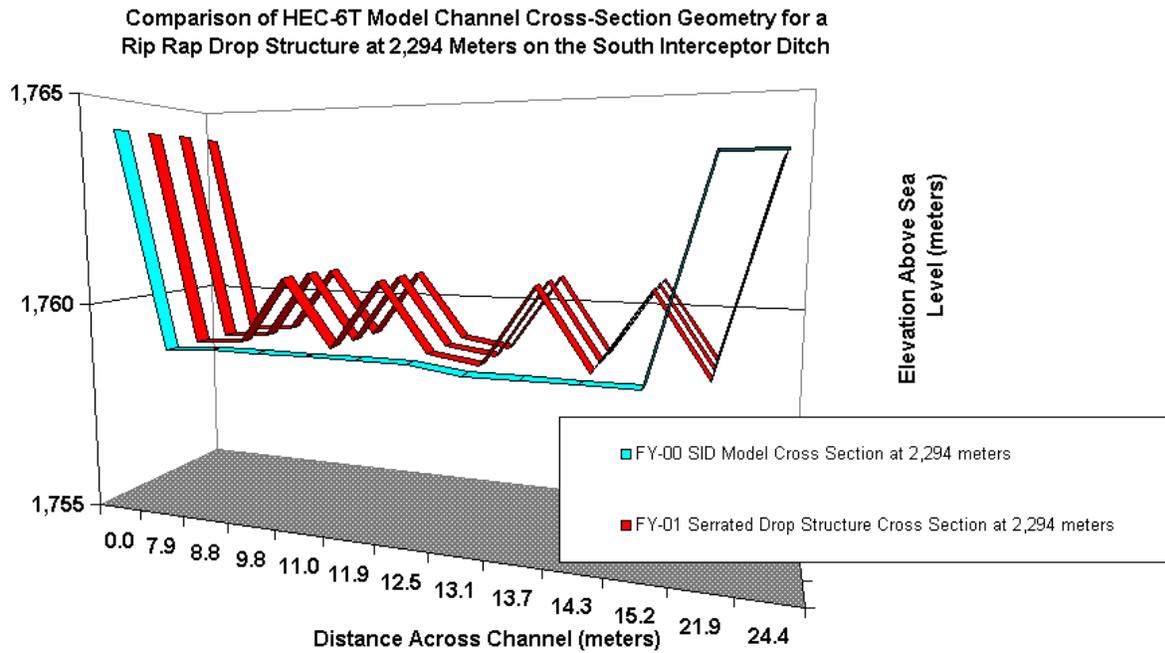


Figure 6. Comparison of Estimated Flow Velocities at Peak Discharge for the SID HEC-6T Models—31.5-mm and 97.1-mm Events

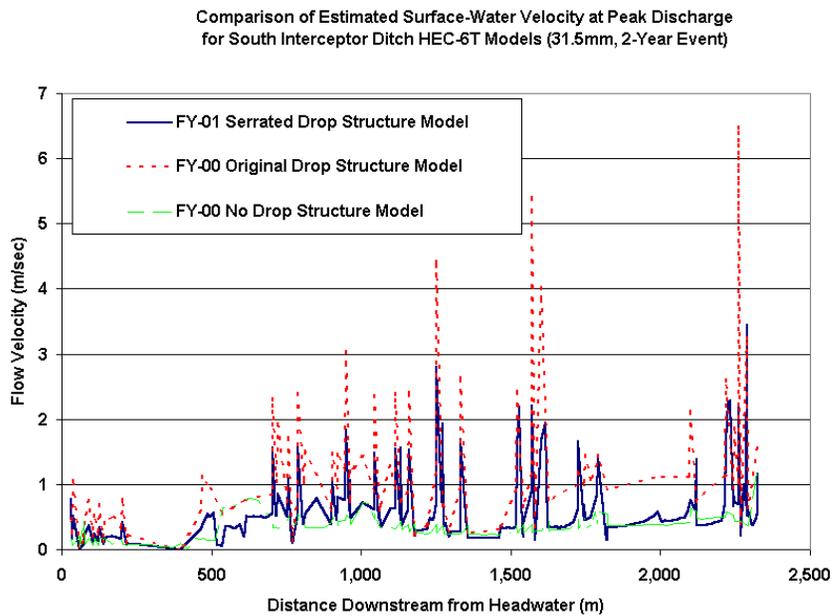
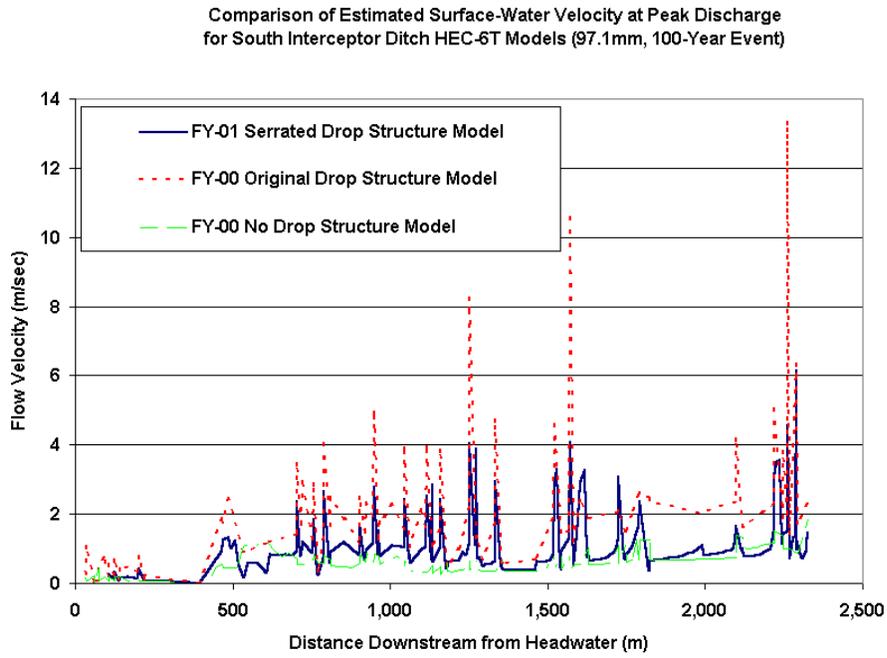


Figure 7. Results of Manning's n-Value Sensitivity Analysis for the FY01 Serrated Drop Structure HEC-6T Model for the SID-62.3-mm, 10-Year Event

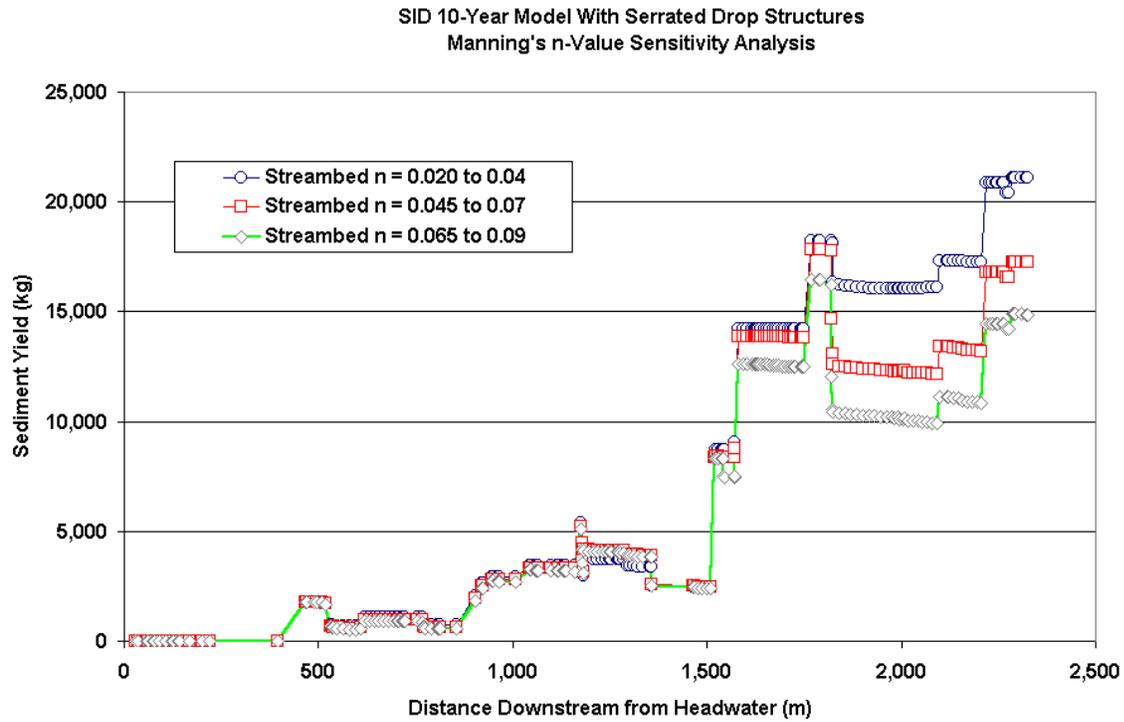


Figure 8. Pu and Am Activity in Bed Sediments for Walnut Creek, the South Interceptor Ditch and Woman Creek

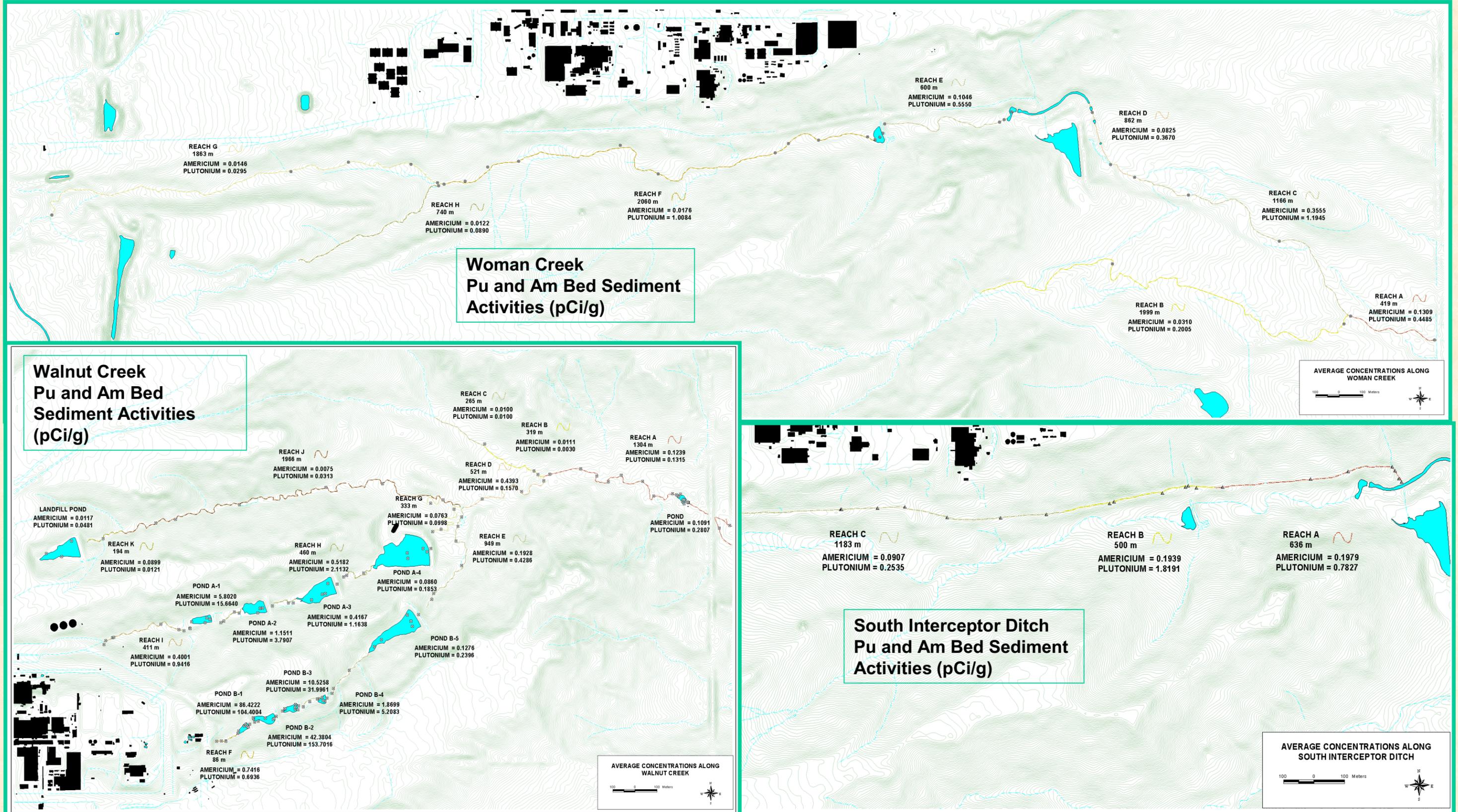


Figure 9. Comparison of Hillslope and Channel Erosion Sediment Yields in Woman Creek.

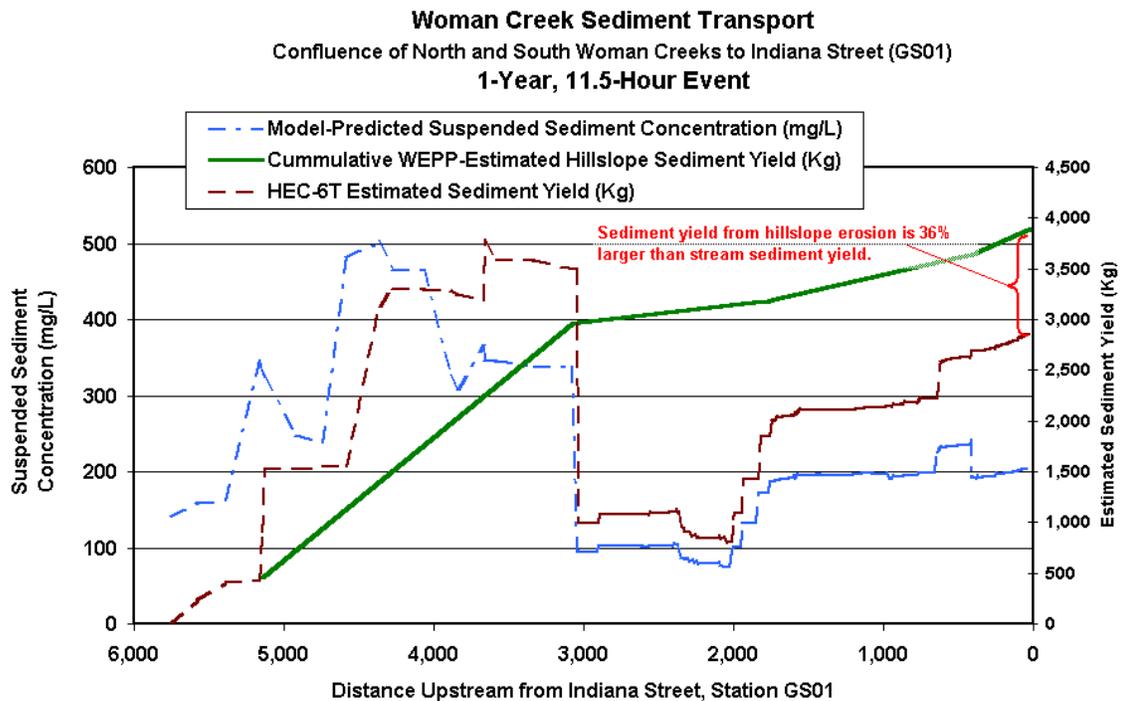
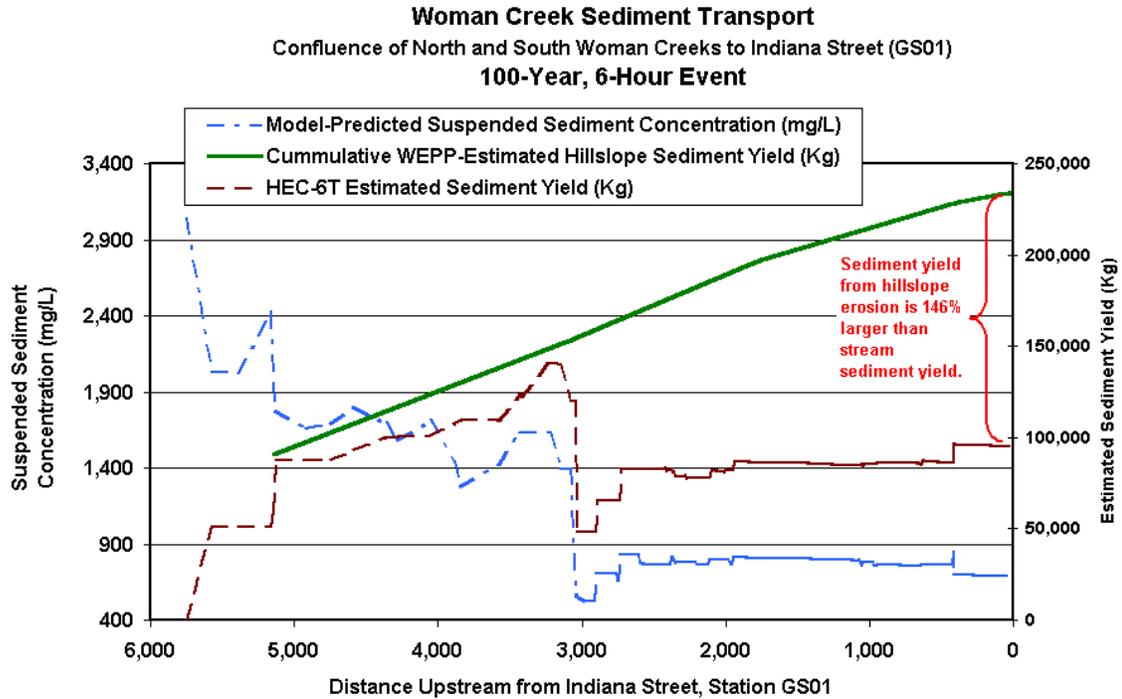


Figure 10. Correlation of Total Suspended Solids and Suspended Sediment Concentrations for Historical Surface Water Monitoring Data

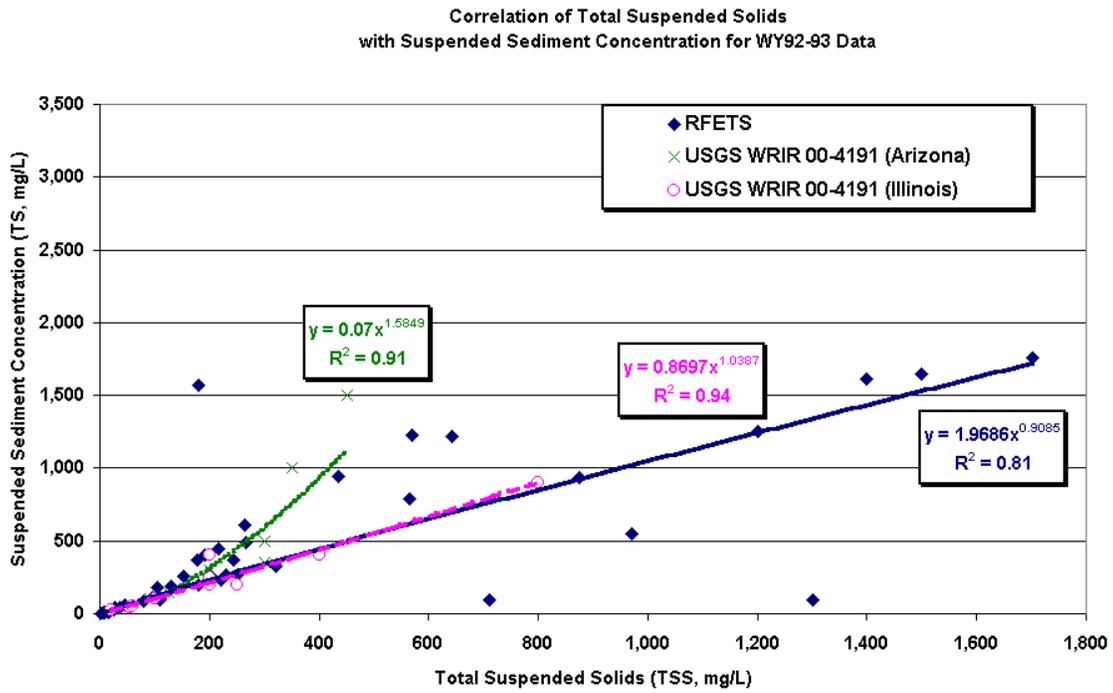


Figure 11. Comparison of HEC-6T Estimated Sediment Yields for Updated No Name Gulch Model

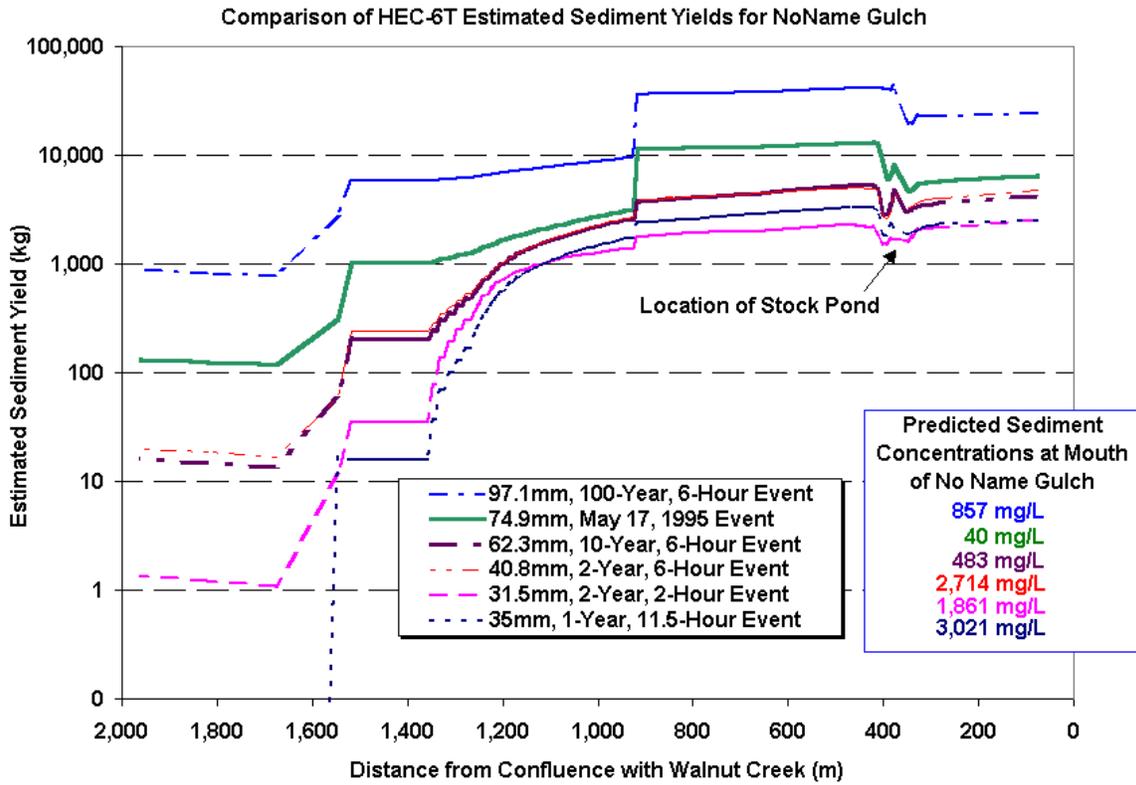


Figure 12. Location and Photographs of Erosion Plots and GS42 Monitoring Station

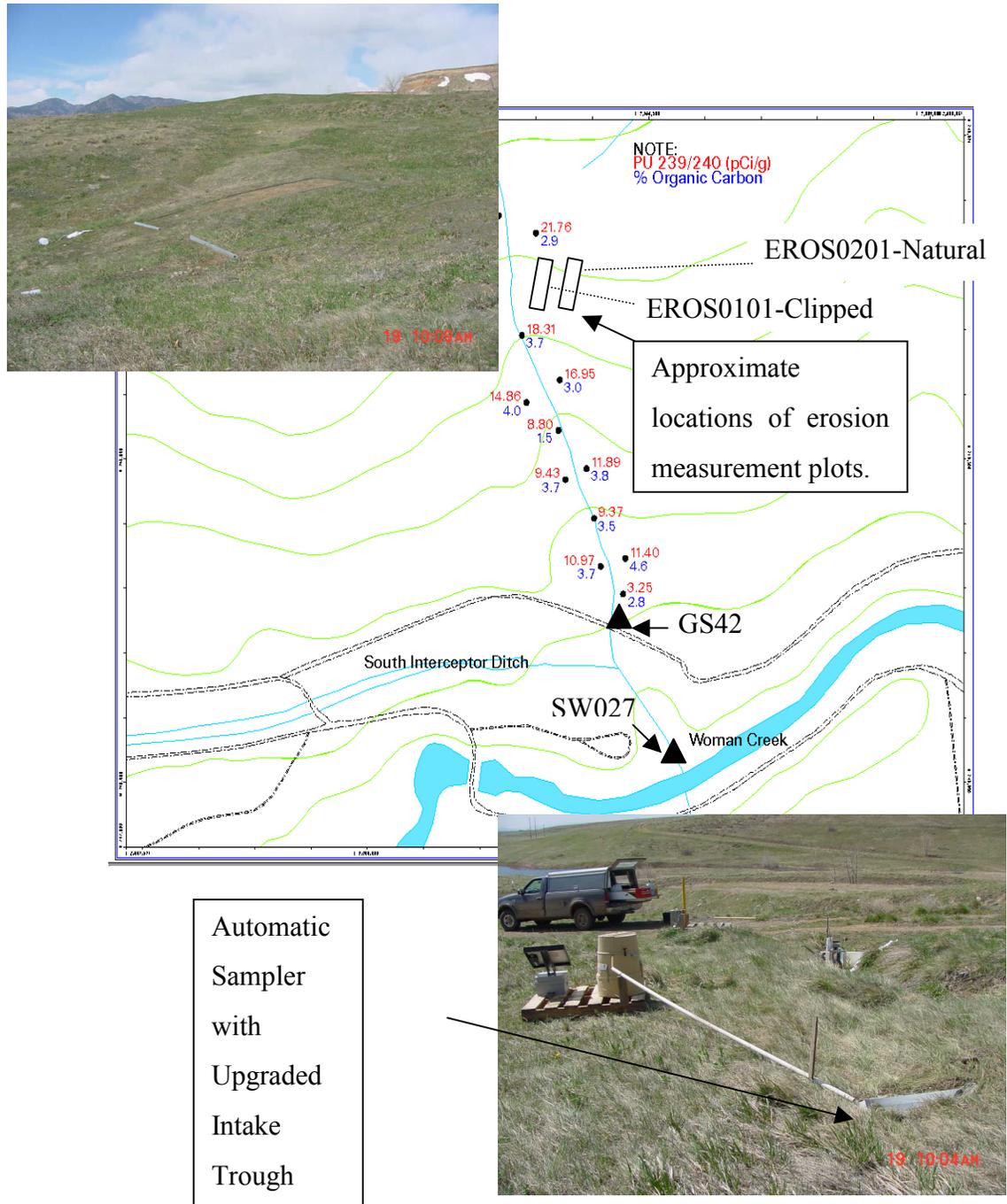
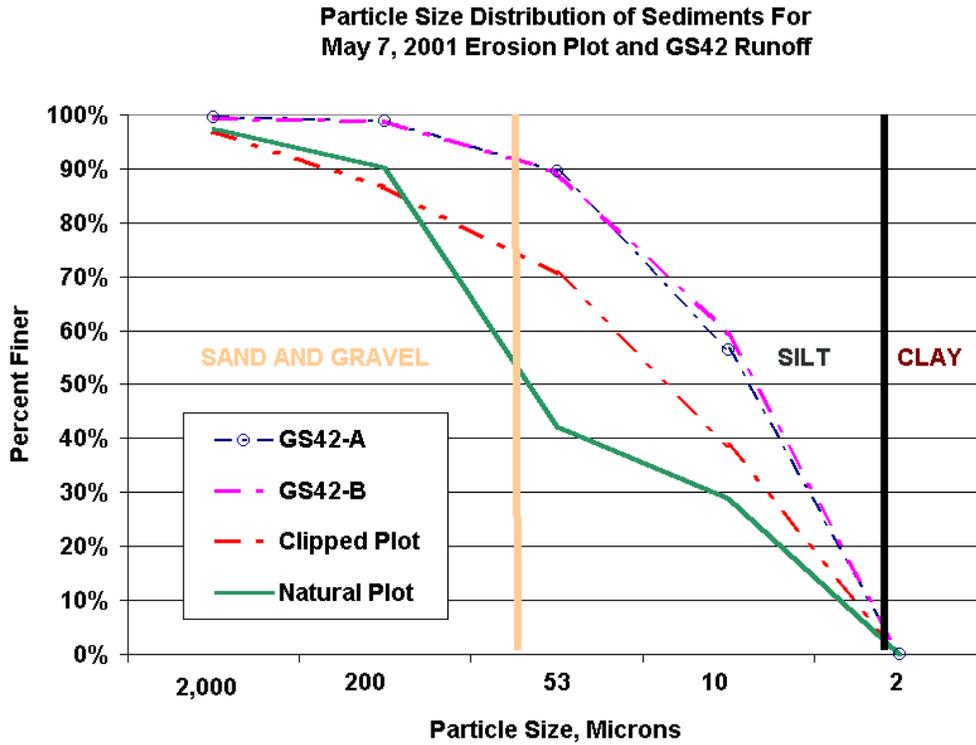


Figure 13. Comparison of Particle Size Distributions for May 7, 2001 Runoff From Erosion Plots and the GS42 Drainage Basin and Water Year 2001 Daily Mean Discharge Hydrograph for GS42



Data Source: Dr. James F. Ranville, Colorado School of Mines, 2000-2001

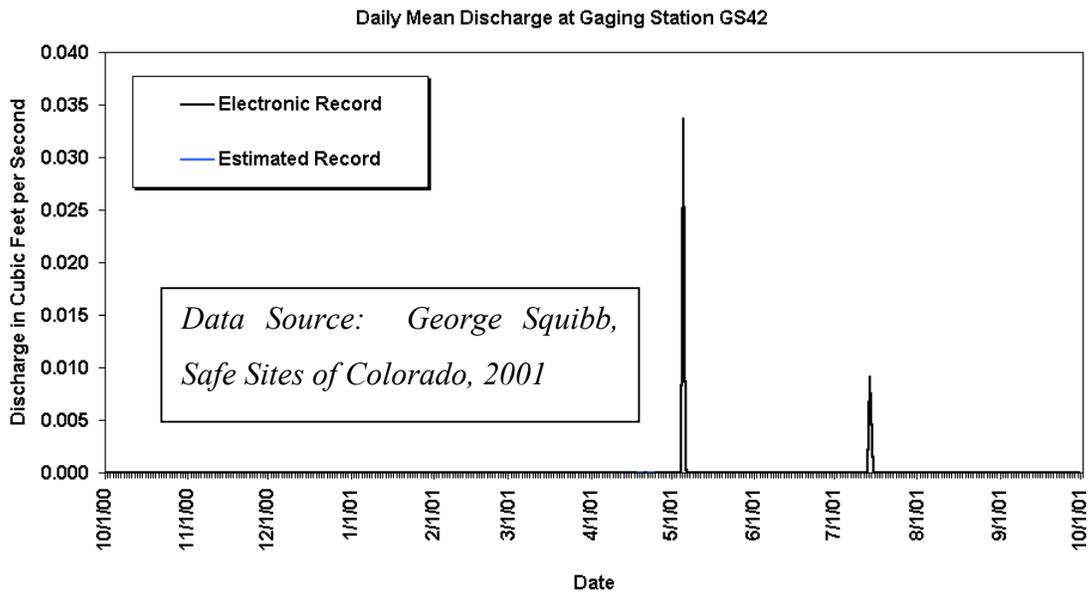
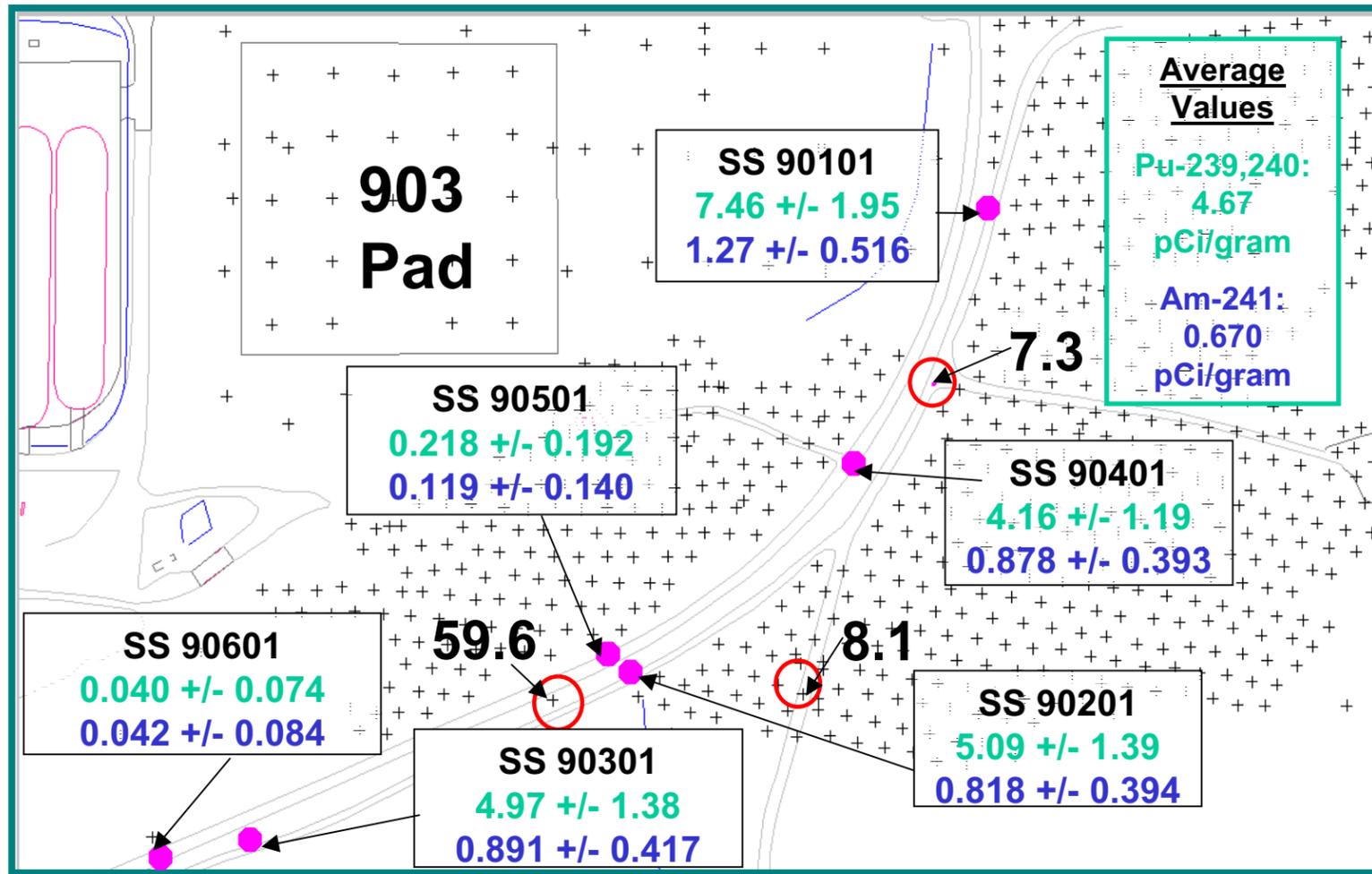


Figure 14. Colorado State University Erosion Plots at the Hope Ranch Adjacent to the Site





Kaiser Hill Company, L.L.C.
Classification Exemption CEX-105-01

Figure 15. Data for Surface Soil Actinide Content for 903 Pad and Lip Area Roads.

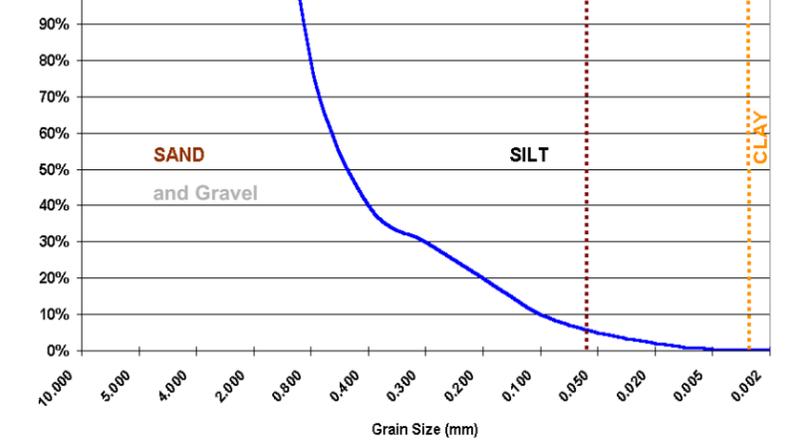
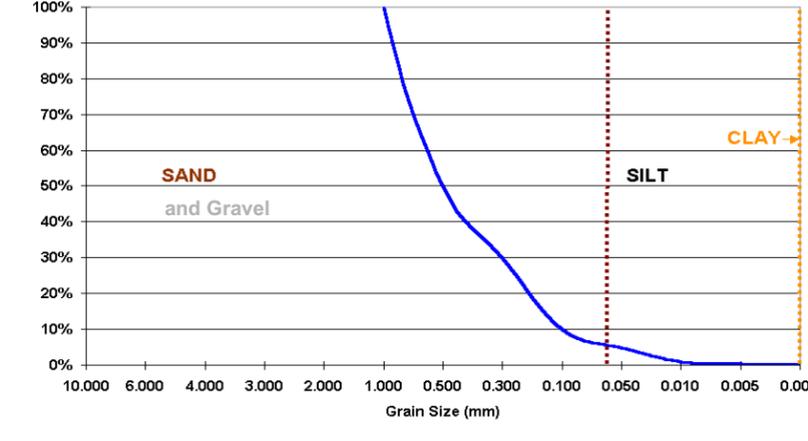
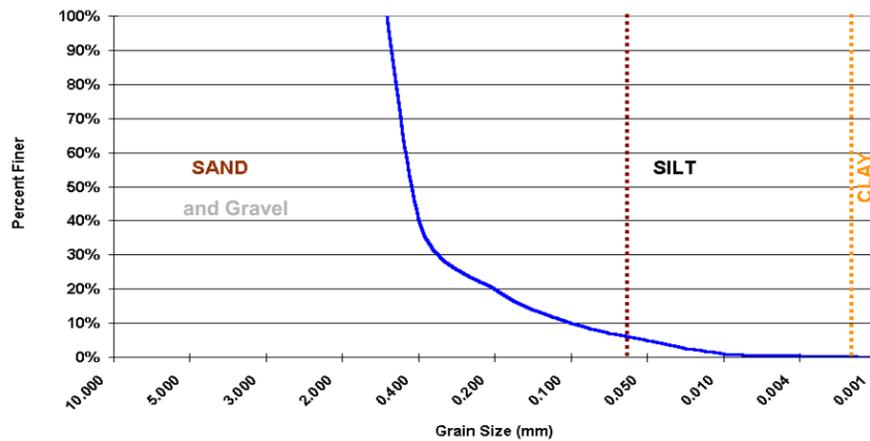
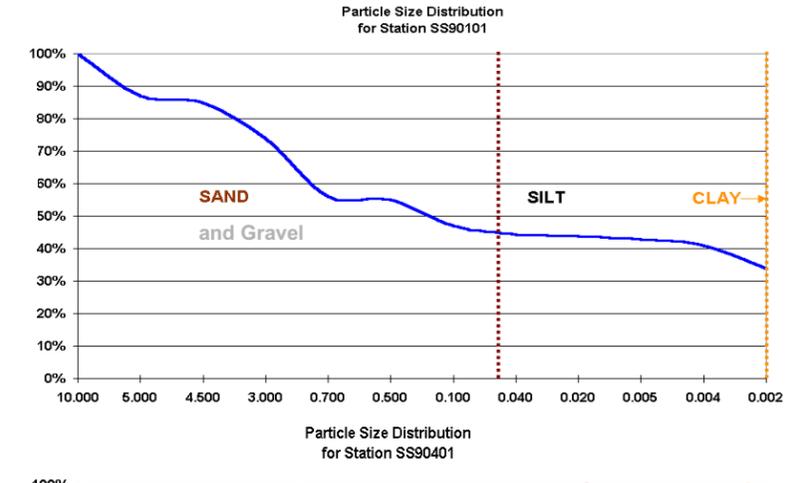
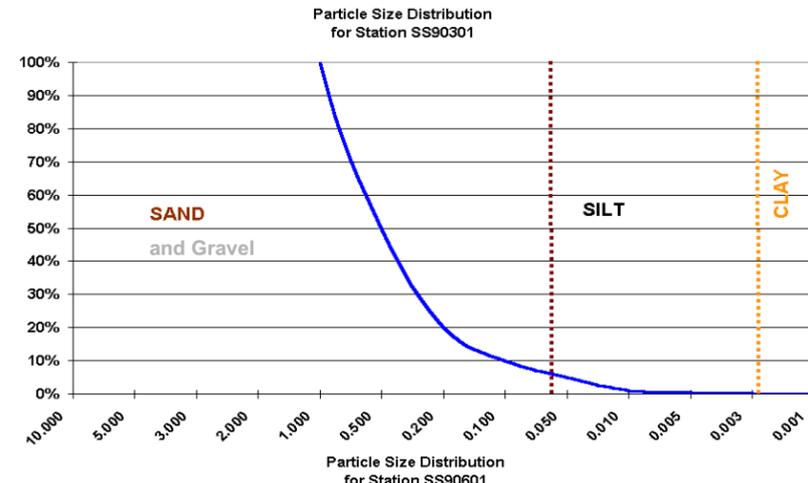
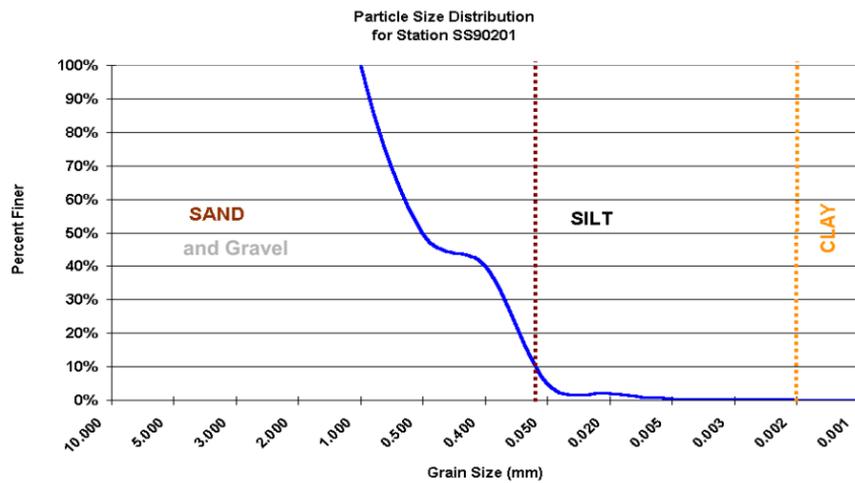
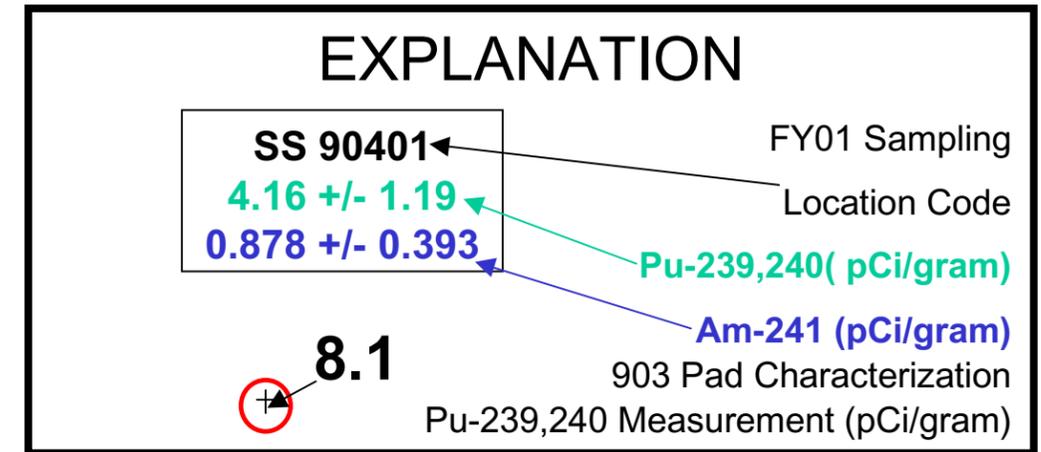
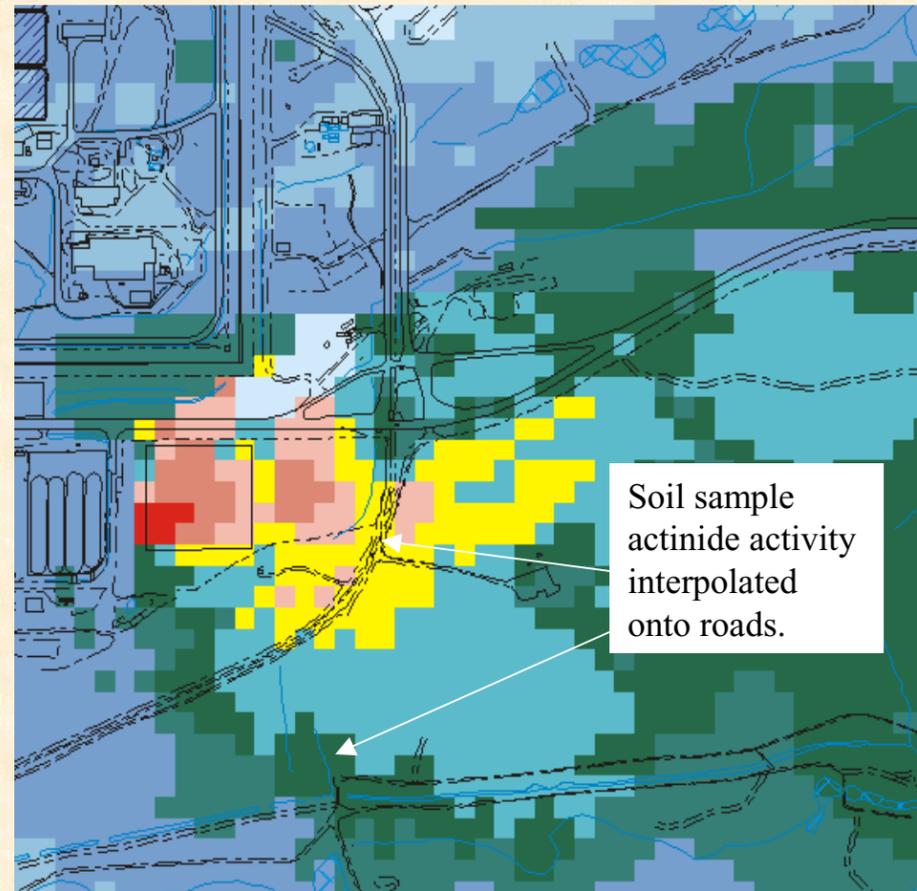
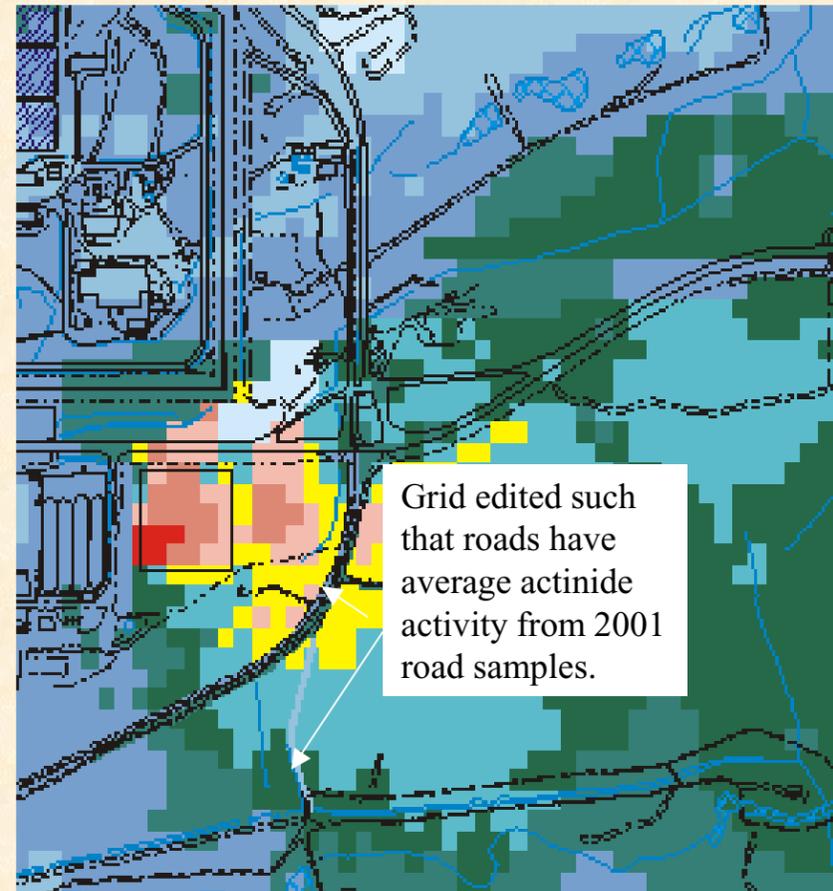


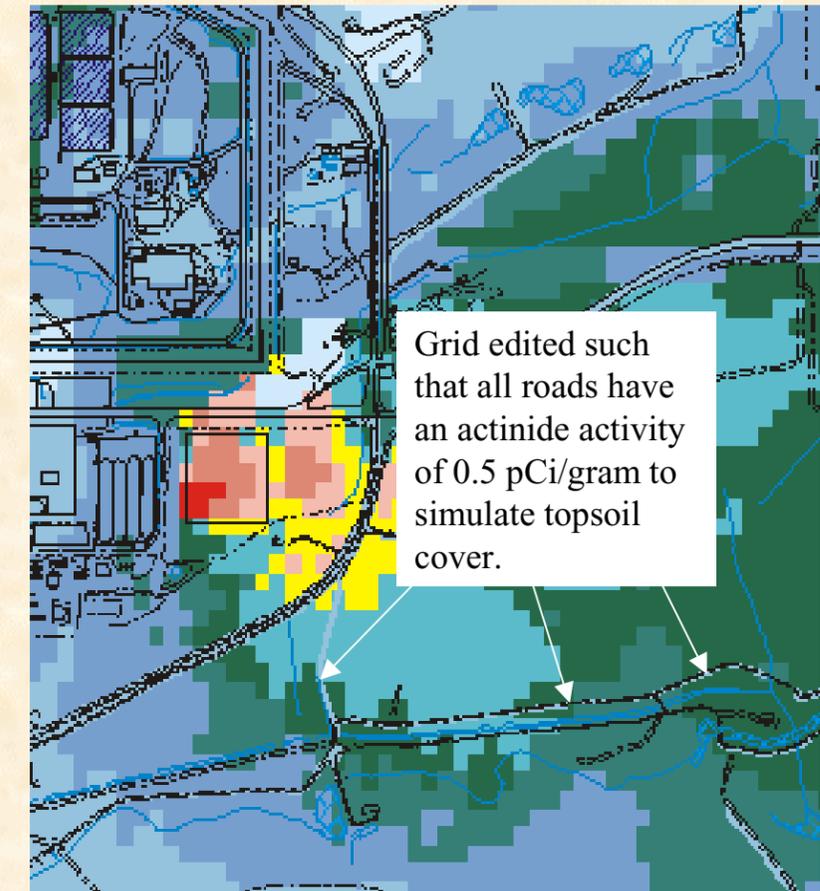
Figure 16.
Pu-239,240 in Surface Soil -
Variations of Kriged Isoplot
Grids Near 903 Pad



Original surface soil Pu kriging analysis presented in the 2000 Erosion Report.



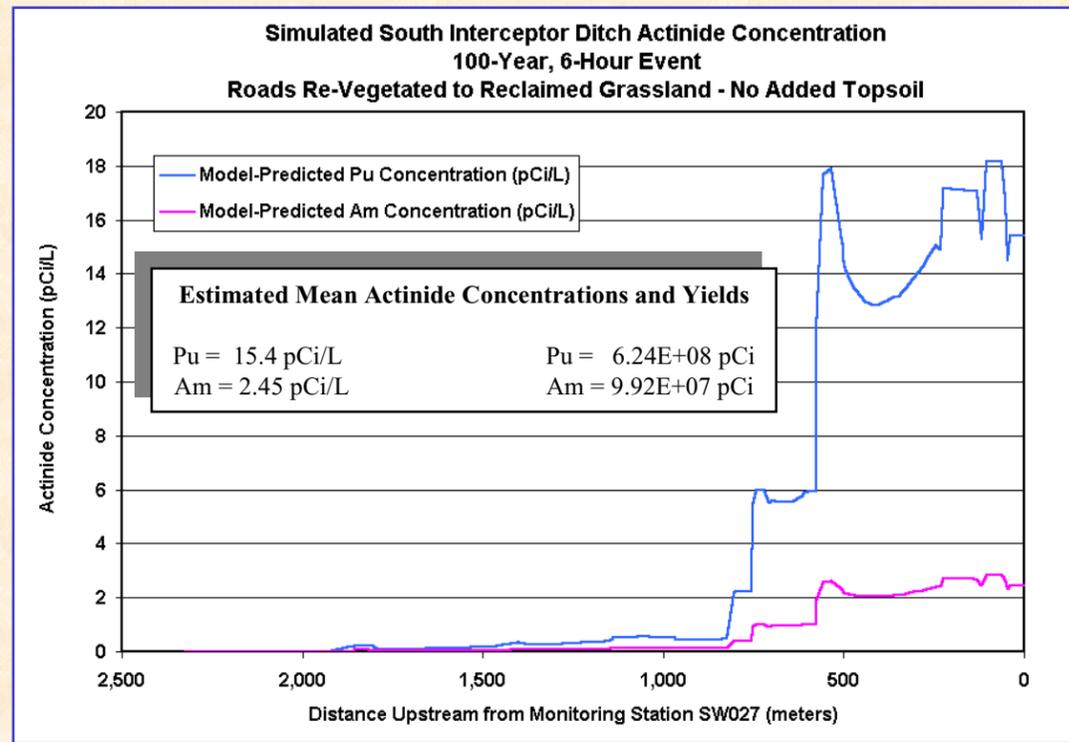
Original surface soil Pu kriging analysis modified with dirt road sample data collected on 5/17/01.



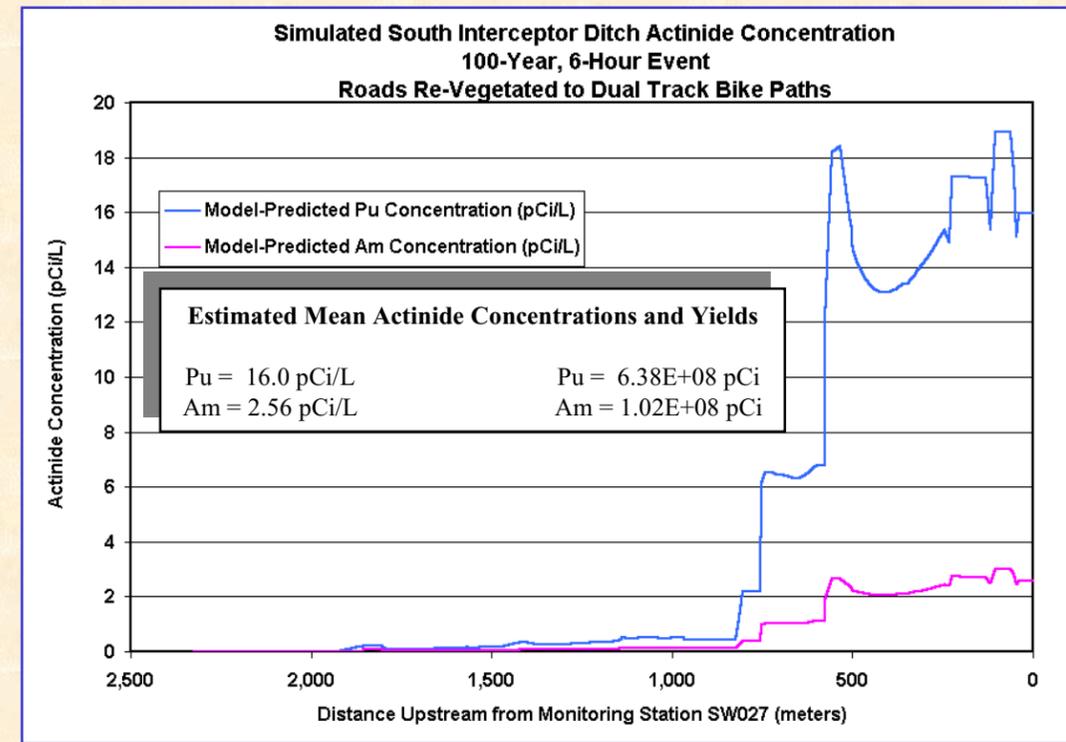
Original surface soil Pu kriging analysis edited with simulated road re-grading and re-vegetation.

Figure 17. Comparison of Road Re-vegetation Scenarios for the SID

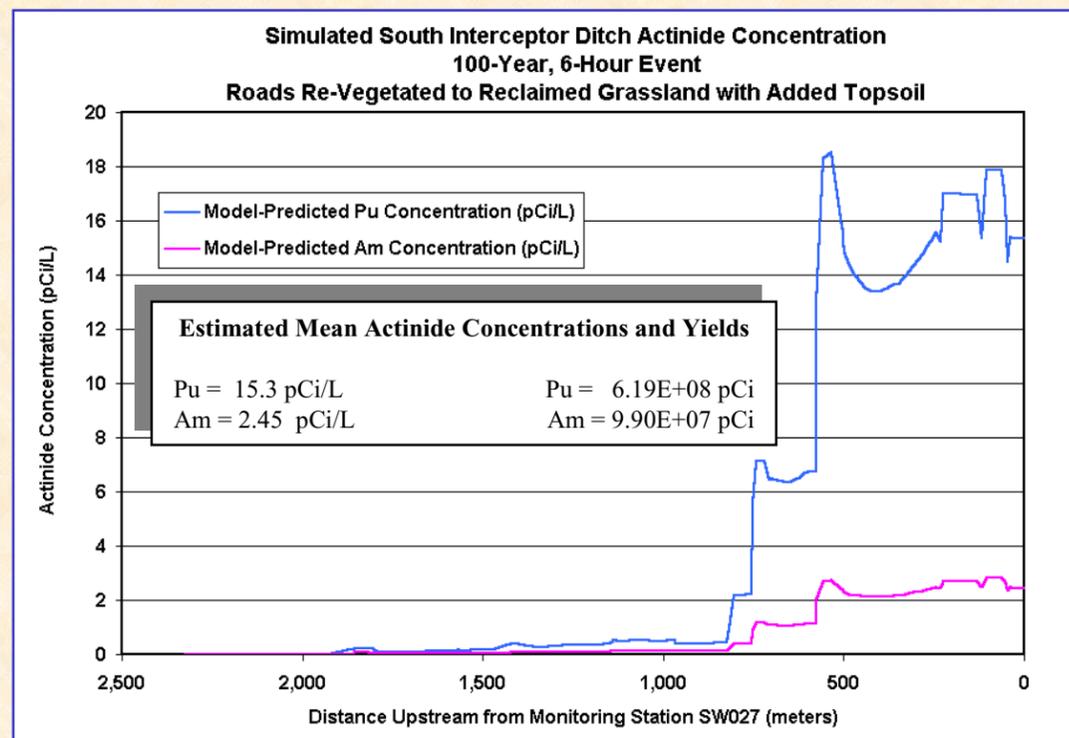
Complete Road Re-vegetation - No Added Topsoil



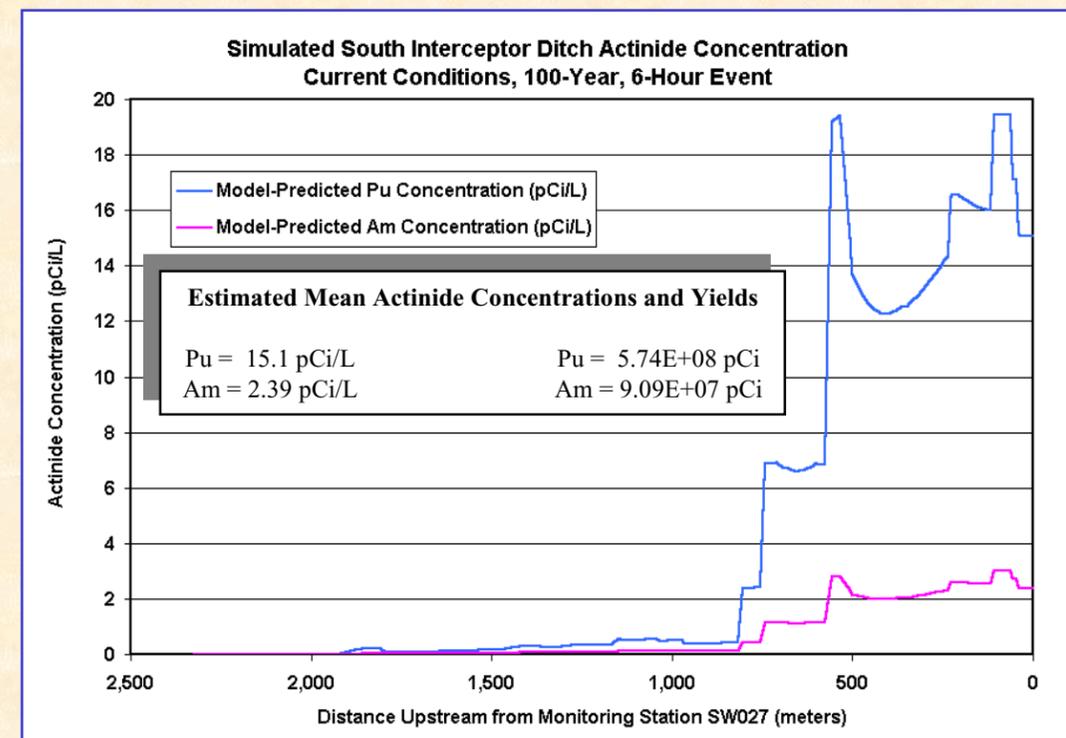
Road Re-vegetation to Dual Track Bike Paths - No Added Topsoil



Complete Road Re-vegetation - Added Topsoil



Existing Conditions

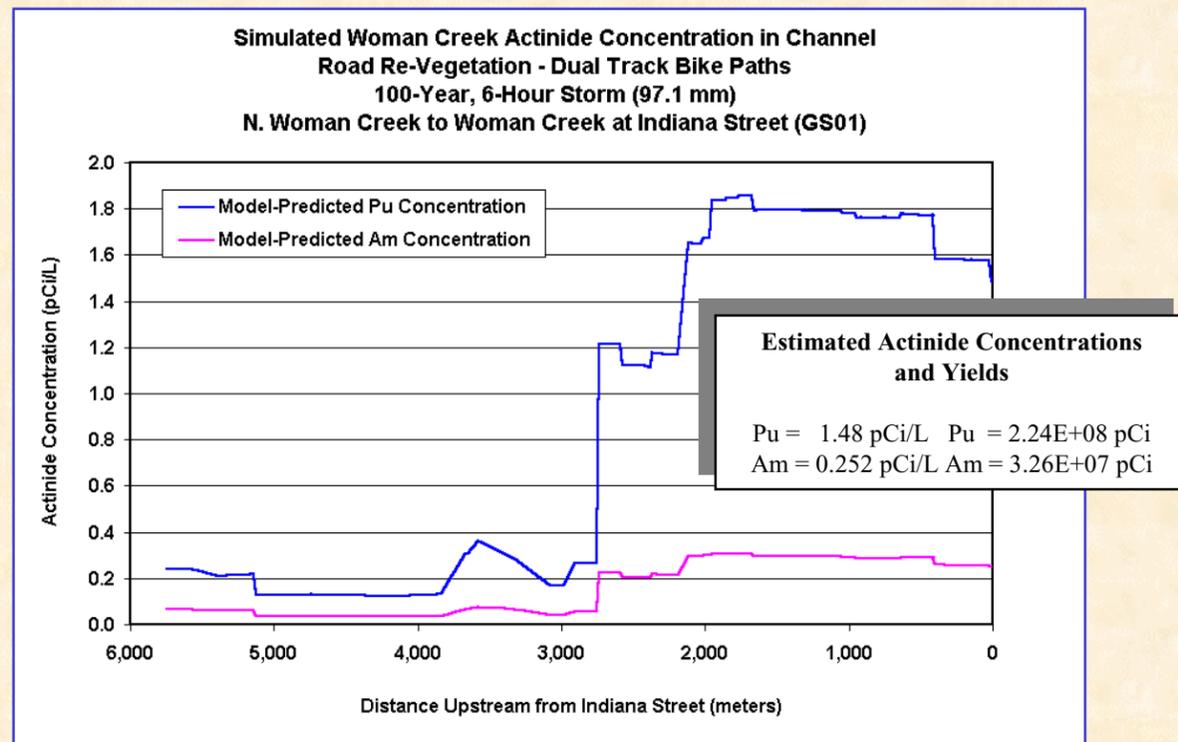


Kaiser Hill Company, L.L.C.

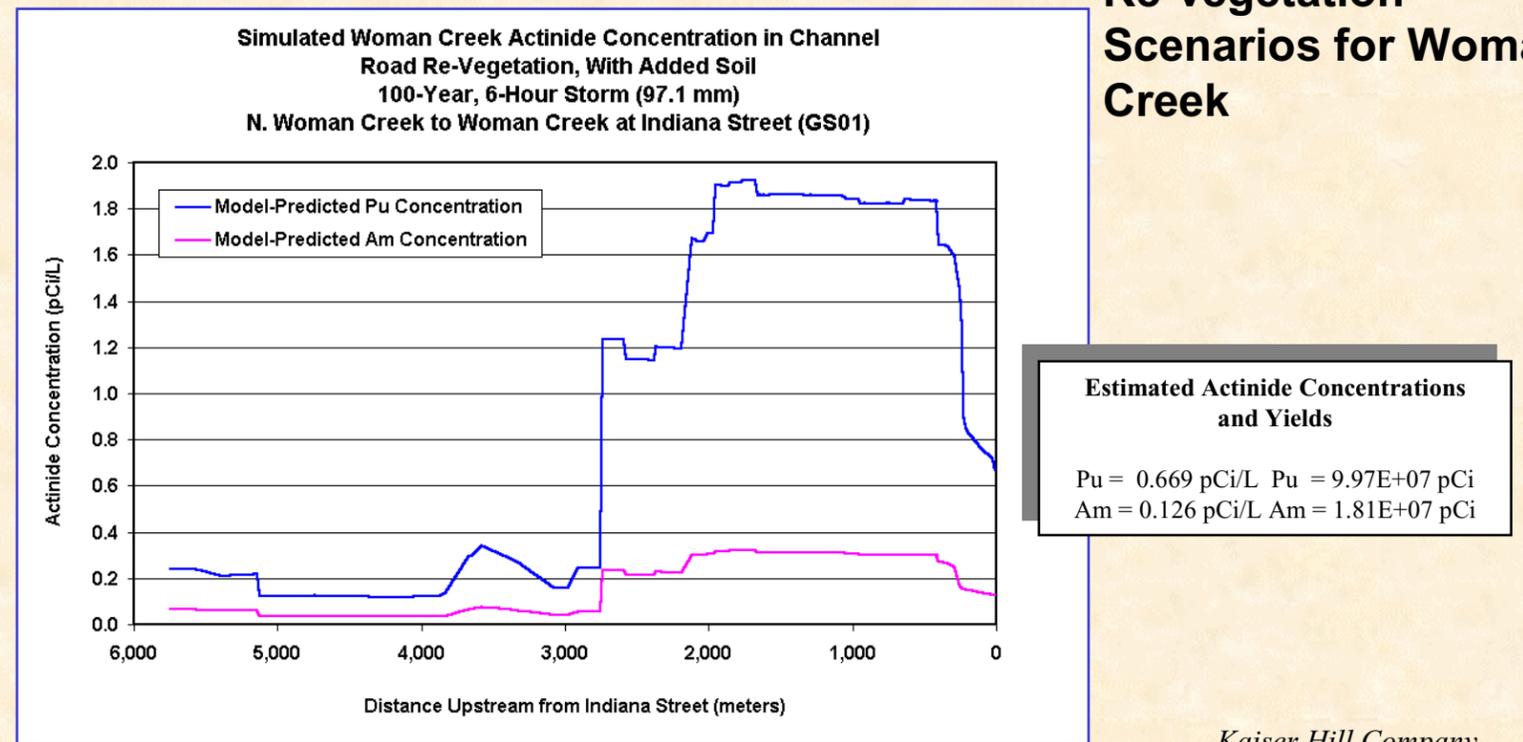
*Classification Exemption
CEX-105-01*

Figure 18.
Comparison of Road
Re-vegetation
Scenarios for Woman
Creek

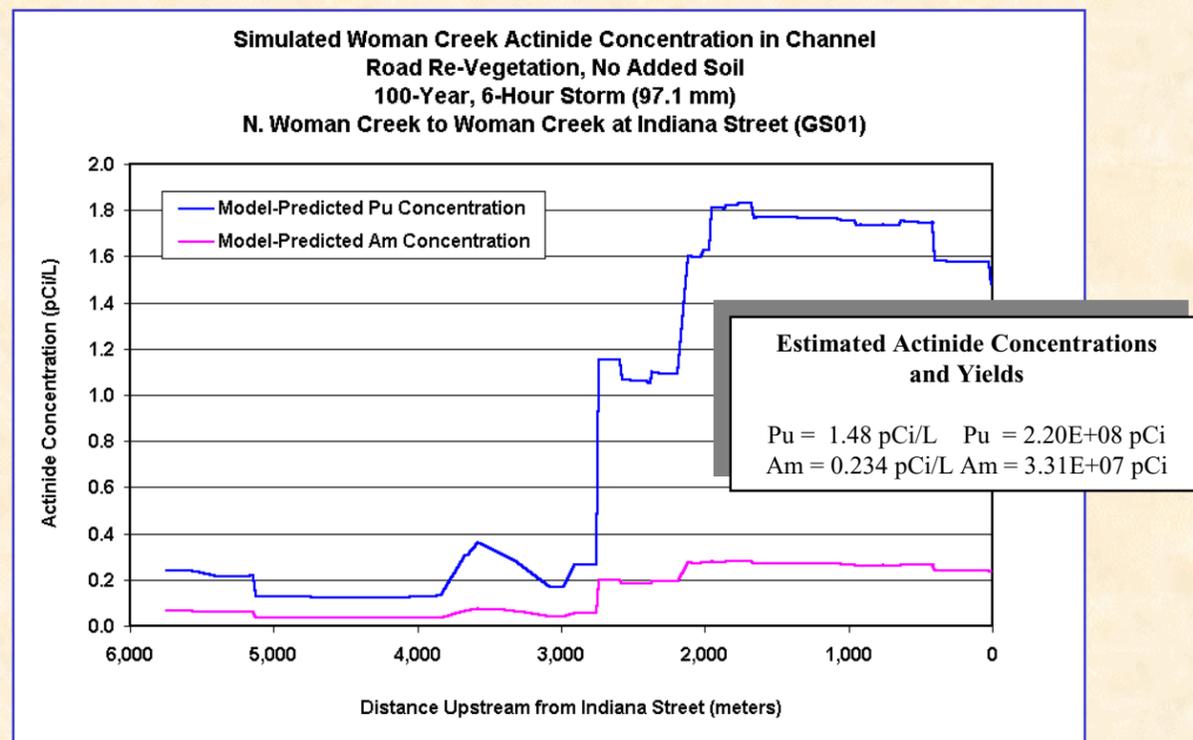
Road Re-vegetation to Dual Track Bike Paths - No Added Topsoil



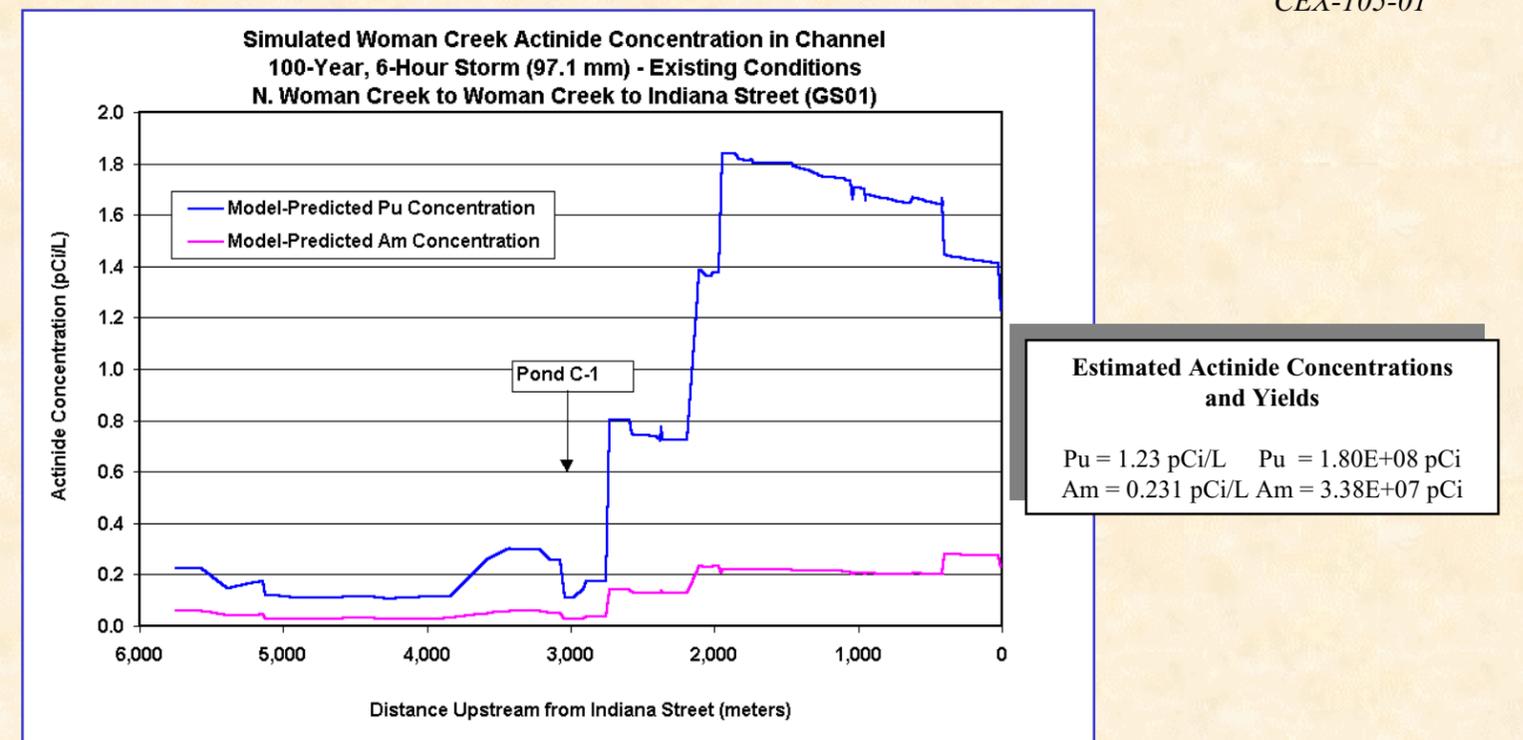
Complete Road Re-vegetation - Added Topsoil



Complete Road Re-vegetation - No Added Topsoil



Existing Conditions

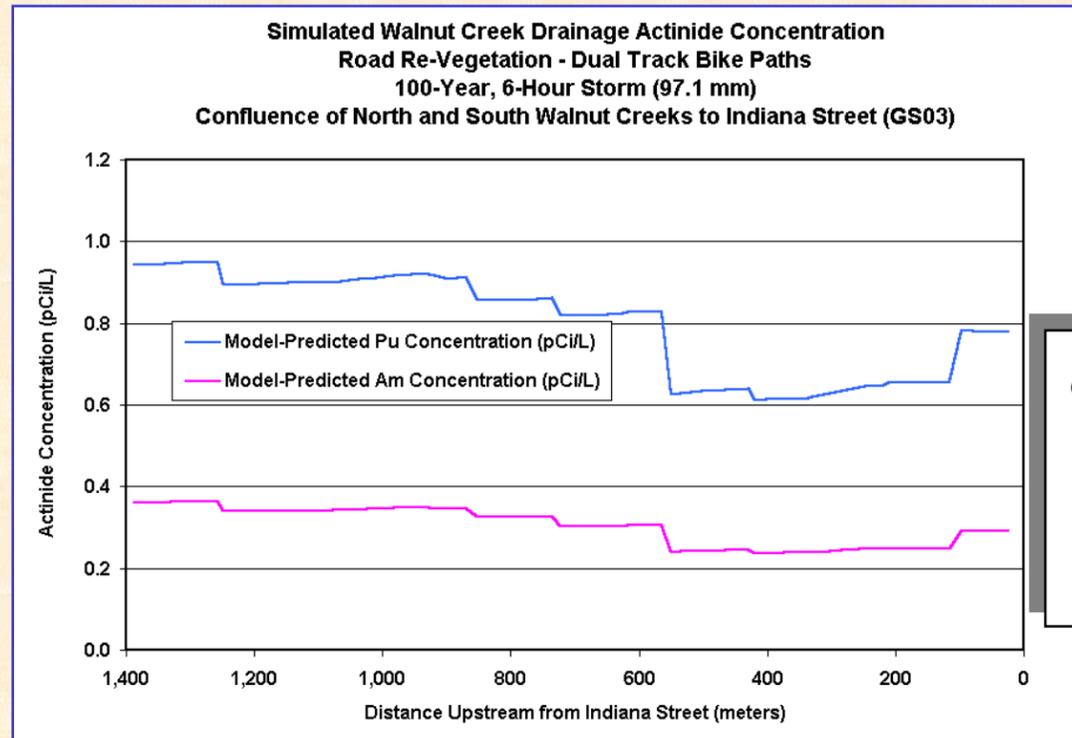


Kaiser Hill Company,
L.L.C.

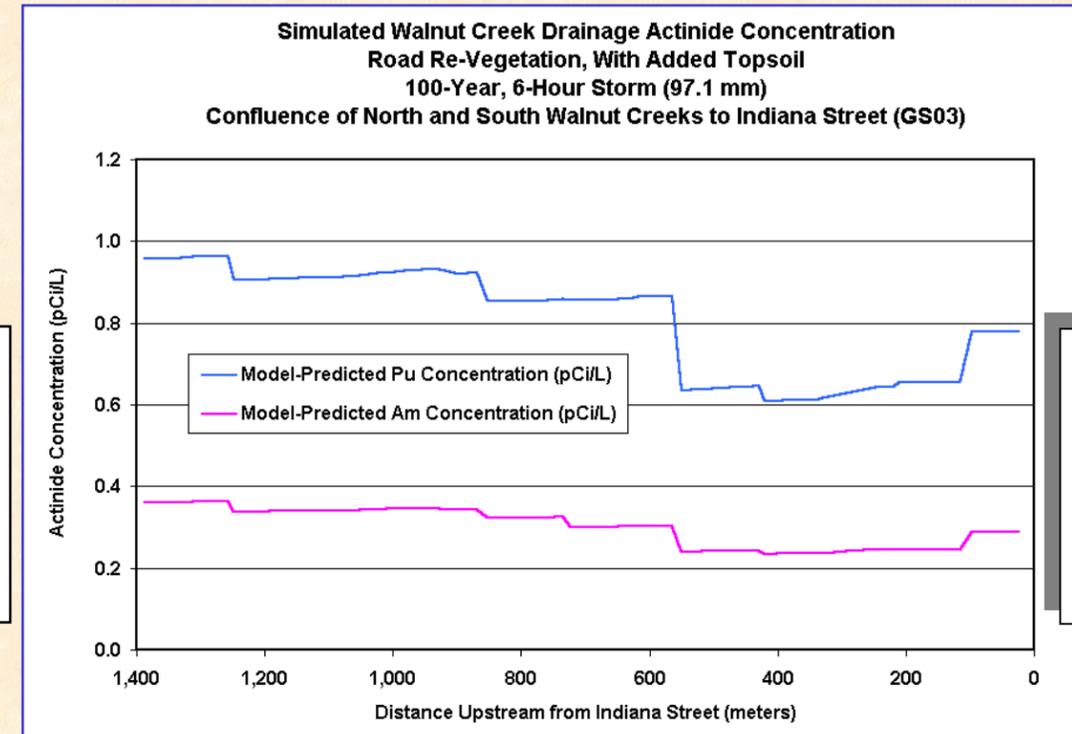
Classification Exemption
CEX-105-01

Figure 19.
Comparison of Road
Re-vegetation
Scenarios for Walnut
Creek

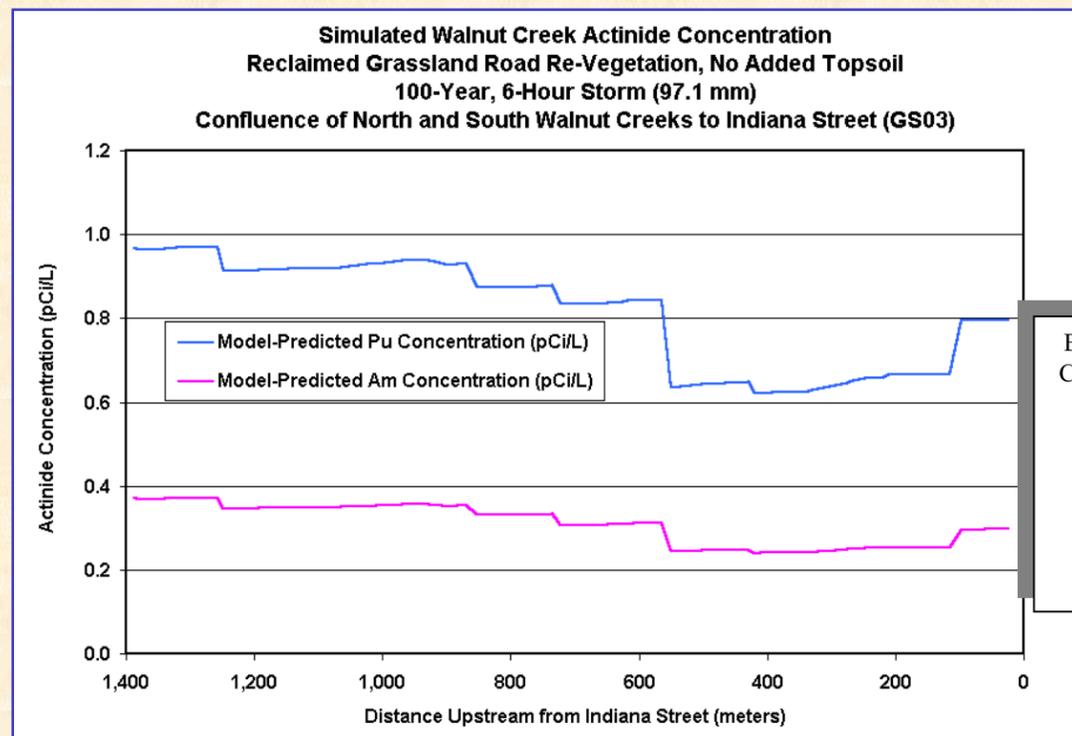
Road Re-vegetation to Dual Track Bike Paths - No Added Topsoil



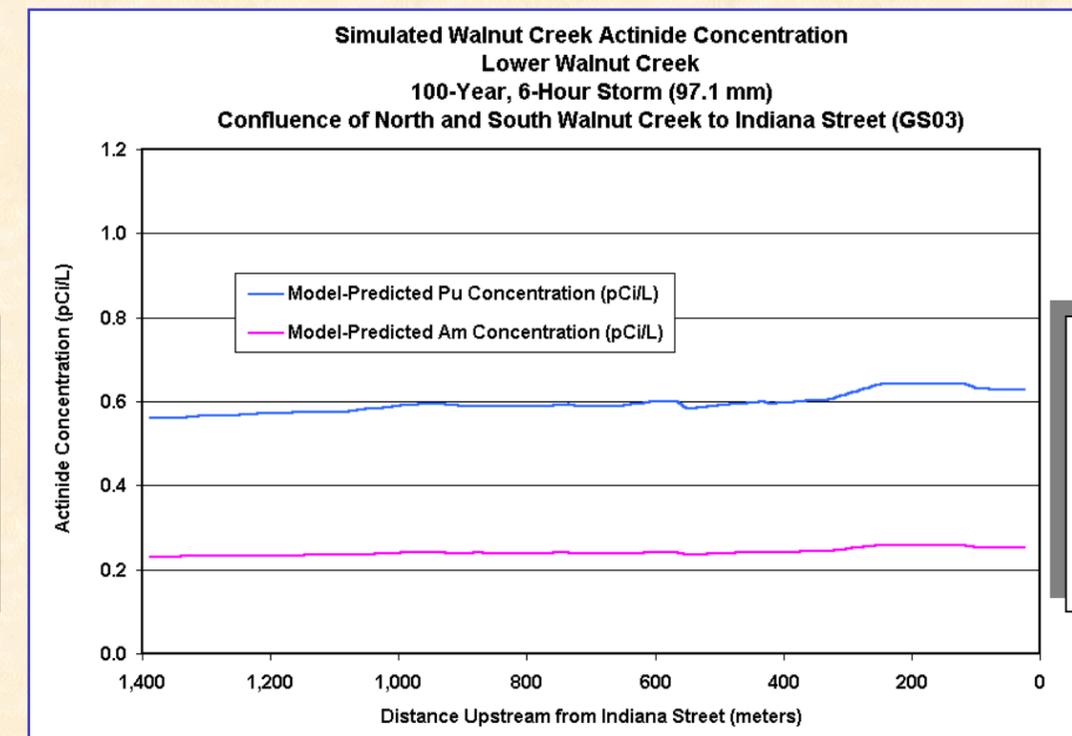
Complete Road Re-vegetation - Added Topsoil



Complete Road Re-vegetation - No Added Topsoil



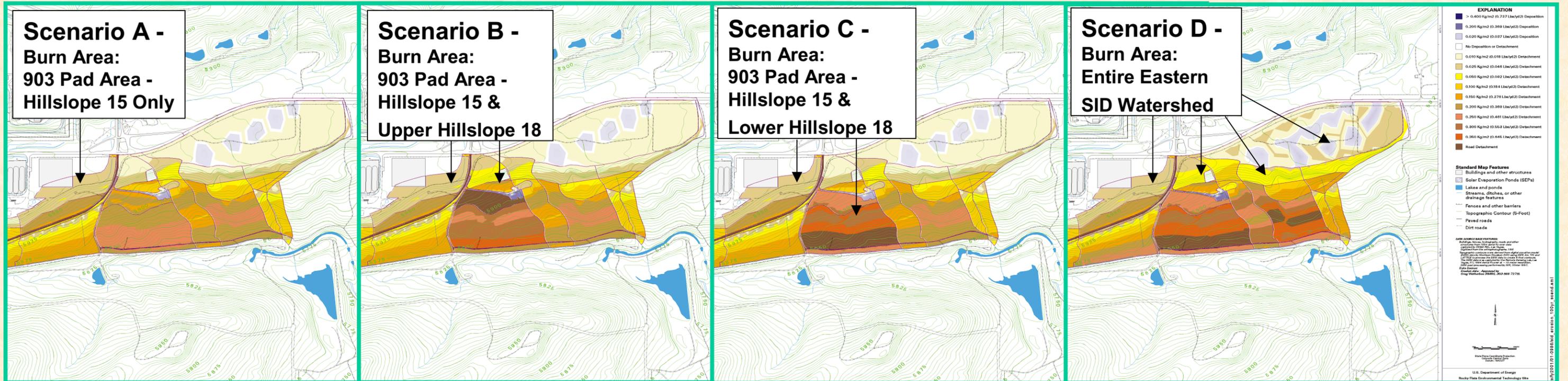
Existing Conditions



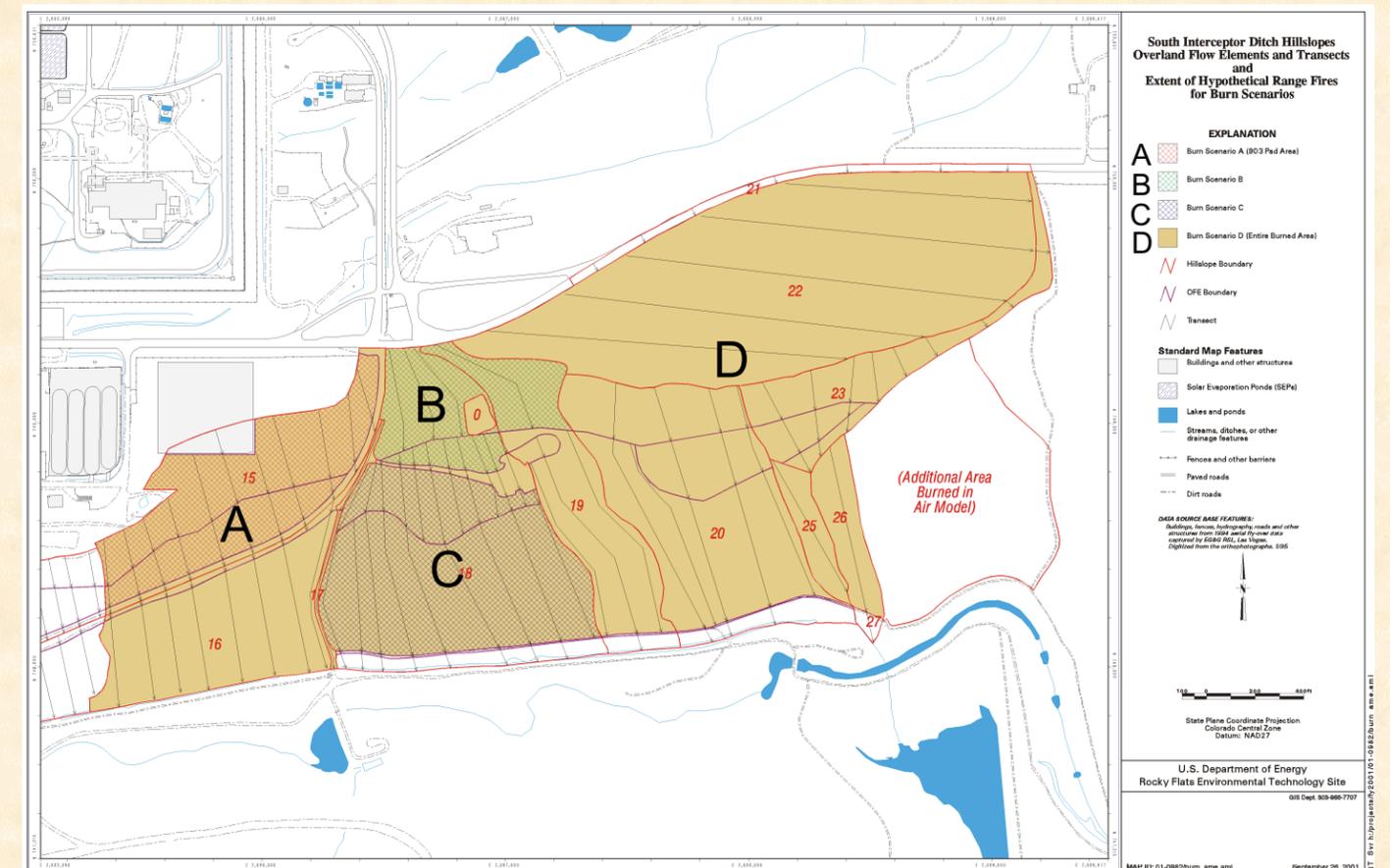
Kaiser Hill Company,
 L.L.C.

Classification Exemption
 CEX-105-01

Figure 20. SID Range Fire Erosion Maps for the 100-Year, 6-Hour Storm (97.1-mm)



Burned area from lightening strike near the East Gate in 2000.



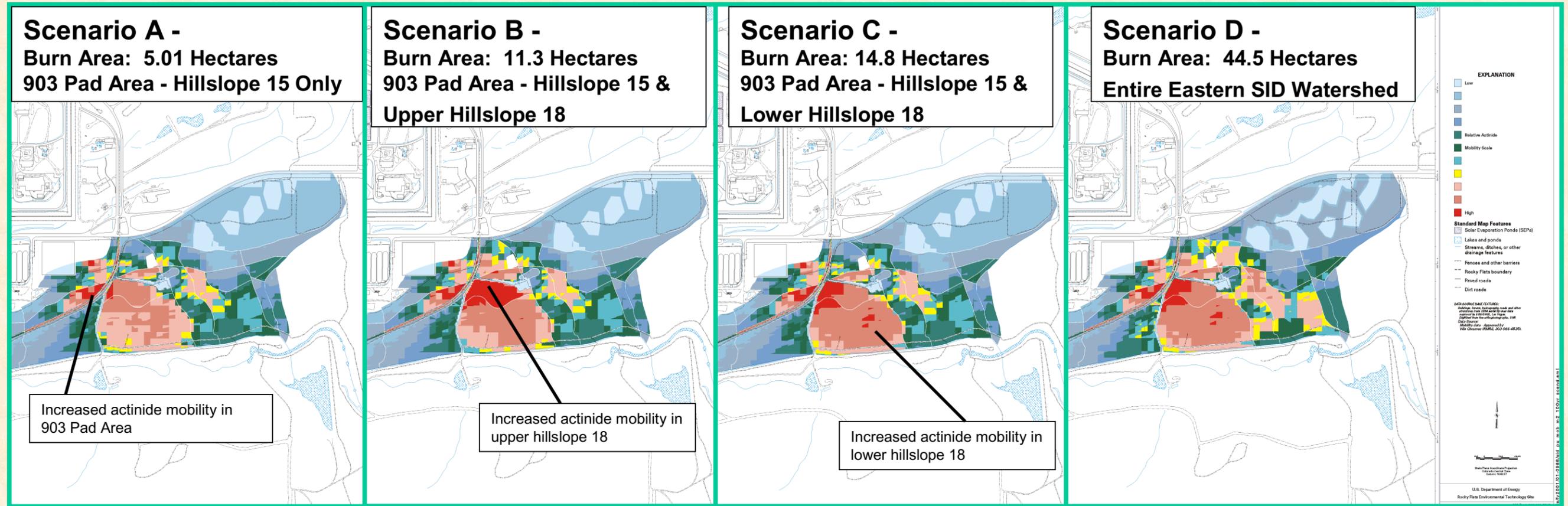
Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01

Figure 21. Examples of Prescribed Burn Vegetation Cover



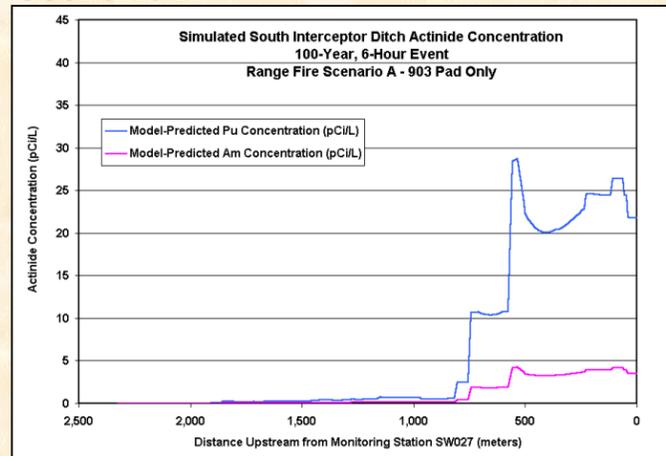
Figure 22. Range Fire Analysis - Impact on Pu and Am Mobility in South Interceptor Ditch Watershed, 100 Year, 6-Hour Storm (97.1-mm)

Pu and Am Mobility Caused by Soil Erosion

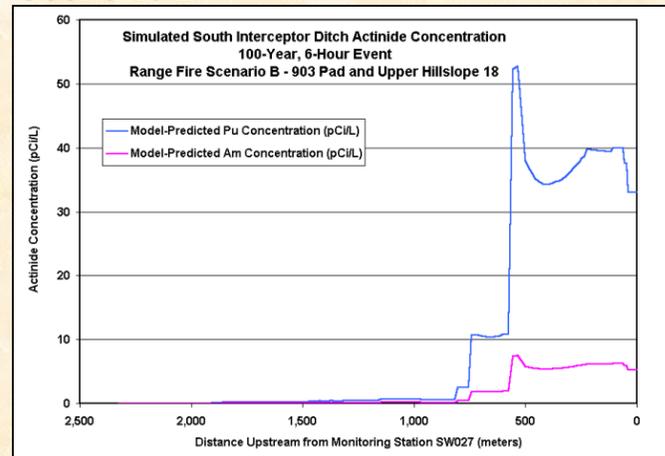


Corresponding Surface Water Pu and Am Concentrations and Yields

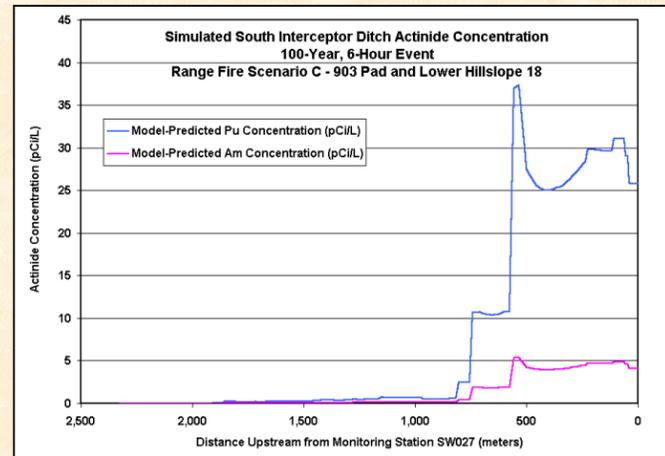
Scenario A



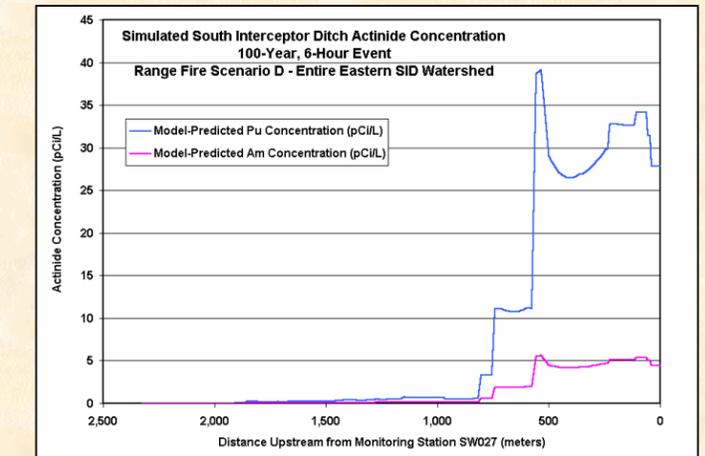
Scenario B



Scenario C



Scenario D



SID Scenarios	Estimated Runoff Yield (m ³)	Estimated Pu Yield (pCi)	Estimated Am Yield (pCi)
Unburned	38,086	5.74E+08	9.09E+07
A	38,401	8.53E+08	1.38E+08
B	39,126	1.31E+09	2.09E+08
C	39,812	1.05E+09	1.67E+08
D	44,310	1.25E+09	1.99E+08

**Figure 23. Time Series of
Ground Surface in 2000
Prescribed Burn Area at the Site**



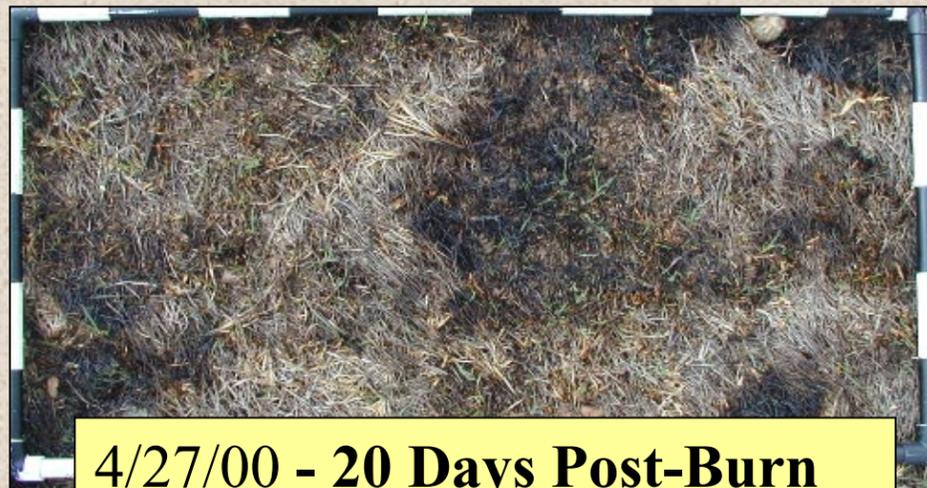
3/13/00 - Before Burn



4/7/00 - 1 Day Post-Burn



4/17/00 - 11 Days Post-Burn



4/27/00 - 20 Days Post-Burn



5/22/00 - 1.5 Months Post-Burn



6/28/00 - 2.5 Months Post-Burn



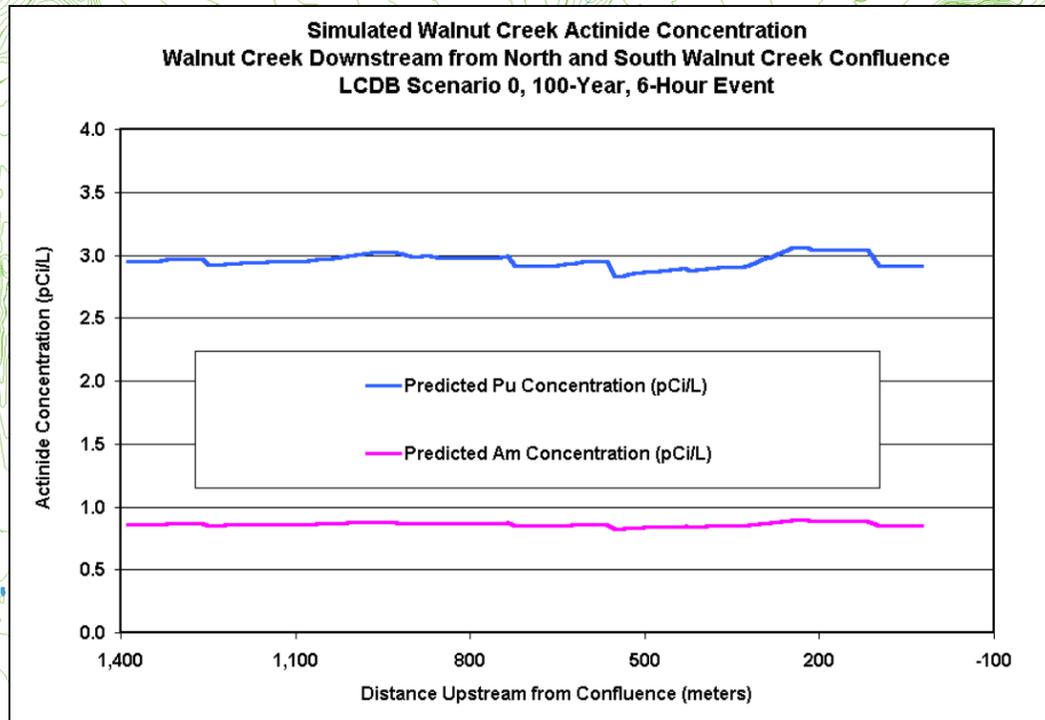
8/10/00 - 4 Months Post-Burn



9/27/00 - 5.5 Months Post-Burn

Photos Provided By
Jody Nelson, RFETS Ecology Group
Kaiser Hill Company, L.L.C.
Classification Exemption CEX-105-01

Figure 24. Preliminary, Hypothetical Site Erosion Map and Predicted Walnut Creek Actinide Concentrations for the 100-Year Event (Land Configuration Design Basis Project Scenario 0)



Estimated Mean Actinide Concentrations and Yields at Indiana Street (GS03)
 Pu = 2.915 pCi/L
 Am = 0.853 pCi/L
 Pu = 4.74E+08 pCi
 Am = 1.39E+08 pCi

Reclaimed Industrial Area

Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01

- EXPLANATION**
- Erosion Model Boundary
 - > 0.400 Kg/m2 (0.737 Lbs/yd2) Deposition
 - 0.200 Kg/m2 (0.369 Lbs/yd2) Deposition
 - 0.020 Kg/m2 (0.037 Lbs/yd2) Deposition
 - No Deposition or Detachment
 - 0.010 Kg/m2 (0.018 Lbs/yd2) Detachment
 - 0.025 Kg/m2 (0.046 Lbs/yd2) Detachment
 - 0.050 Kg/m2 (0.092 Lbs/yd2) Detachment
 - 0.100 Kg/m2 (0.184 Lbs/yd2) Detachment
 - 0.150 Kg/m2 (0.276 Lbs/yd2) Detachment
 - 0.200 Kg/m2 (0.369 Lbs/yd2) Detachment
 - 0.250 Kg/m2 (0.461 Lbs/yd2) Detachment
 - 0.300 Kg/m2 (0.553 Lbs/yd2) Detachment
 - 0.350 Kg/m2 (0.645 Lbs/yd2) Detachment
 - Road Detachment
 - Area not modeled
 - Wetland
- Standard Map Features**
- Lakes and ponds
 - Streams, ditches, or other drainage features
 - Topographic Contour (5-Foot)

DATA SOURCE BASE FEATURES:
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by ESRI GIS, Las Vegas.
 Digitized from the orthophotographs, 1/96
 Topographic contours were derived from digital elevation model (DEM) data by Morrison Knudsen (MK) using ESRI Arc TIN and LATIC to process the DEM data to create 5-foot contours. The DEM data was captured by the Remote Sensing Lab, Las Vegas, NV, 1986 Aerial Photos at 10 meter resolution. DEM post-processing performed by MK, Winter 1997.

DISCLAIMER:
 Neither the United States Government nor Kaiser Hill Co., nor Morrison Knudsen, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe upon privately owned rights.

Scale = 1 : 18360
 1 inch represents approximately 1813 feet

State Plane Coordinate Projection
 Colorado Central Zone
 Datum: NAD83

U.S. Department of Energy
 Rocky Flats Environmental Technology Site
 GIS Dept. 303-966-7707

Figure 25
1-Year, 11.5-Hour, 35-mm Event

Pu-239,240 Mobility

South Interceptor Ditch
EXPLANATION

- Low
- Relative Actinide
- Mobility Scale
- High

Standard Map Features

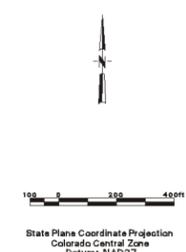
- Solar Evaporation Ponds (SEPs)
- Lakes and ponds
- Streams, ditches, or other drainage features
- Fences and other barriers
- Rocky Flats boundary
- Paved roads
- Dirt roads

DATA SOURCE BASE FEATURES:

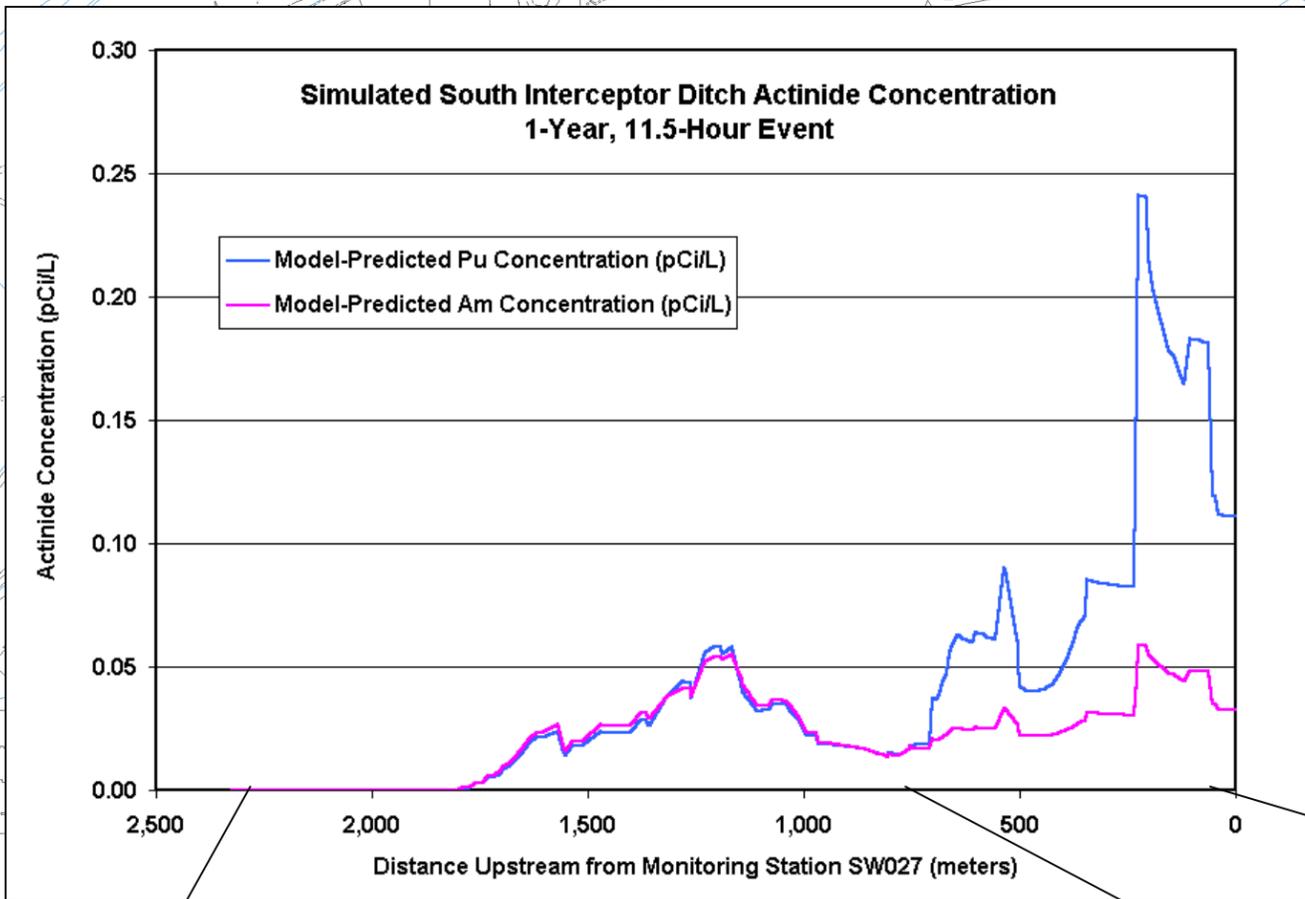
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95

Buildings, fences, hydrography, roads and other structures from 1954 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95

DISCLAIMER:
 Neither the United States Government nor Kaiser Hill Co., nor DynCorp I&ET, nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.



U.S. Department of Energy
 Rocky Flats Environmental Technology Site



Estimated Mean Actinide Concentrations and Yields At SW027

Pu = 0.011 pCi/L
 Am = 0.033 pCi/L

Pu = 4.36E+05 pCi
 Am = 1.28E+05 pCi

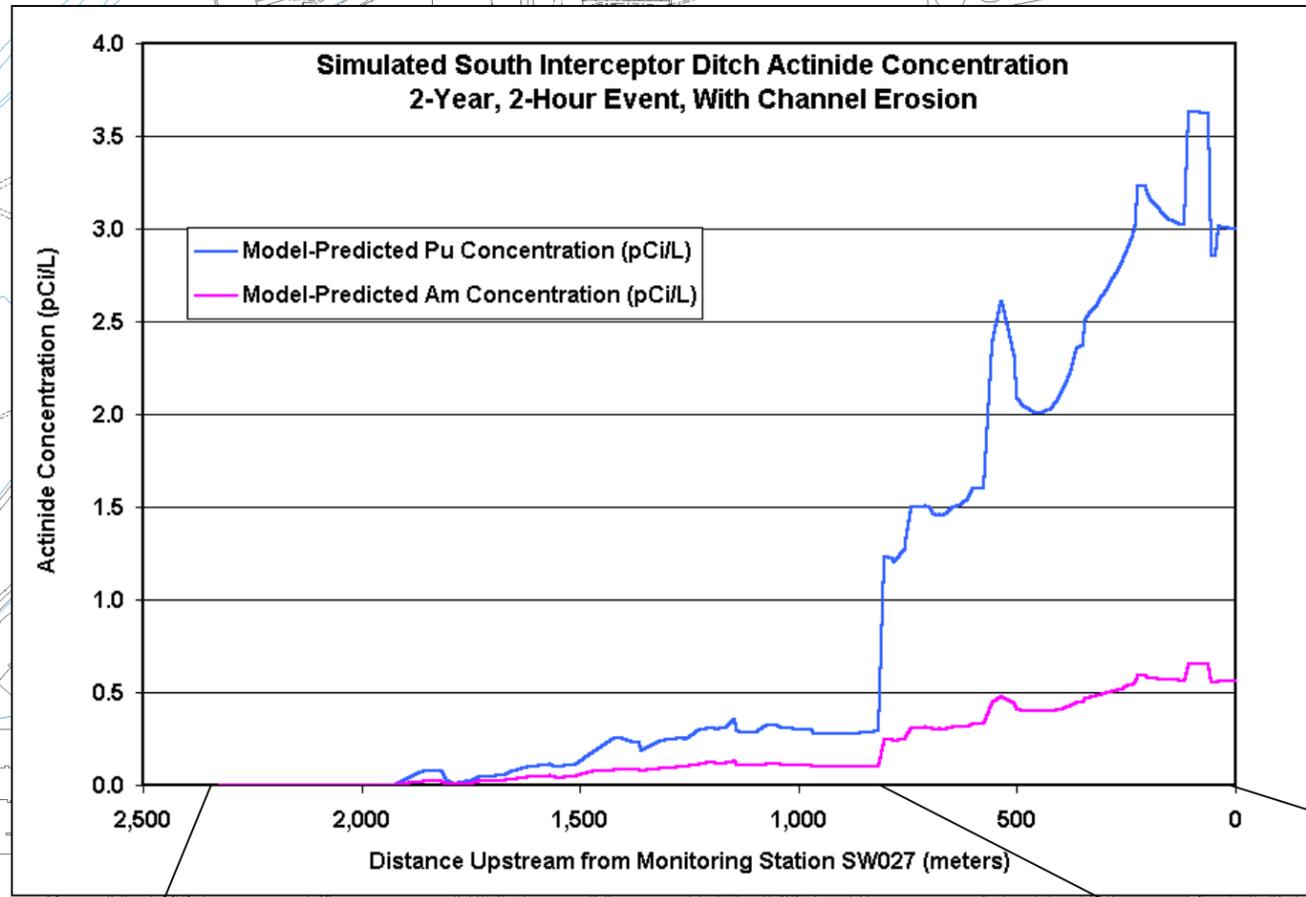
Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01

Figure 26
2-Year, 2-Hour, 31.5-mm Event

Pu-239,240 Mobility

South Interceptor Ditch
EXPLANATION

- Low
 -
 -
 -
 - Relative Actinide
 - Mobility Scale
 -
 -
 -
 -
 - High
 - Standard Map Features**
 - Solar Evaporation Ponds (SEPs)
 - Lakes and ponds
 - Streams, ditches, or other drainage features
 - Fences and other barriers
 - Rocky Flats boundary
 - Paved roads
 - Dirt roads
- DATA SOURCE BASE FEATURES:**
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G FSL, Las Vegas. Digitized from the orthophotographs. 1/95
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G FSL, Las Vegas. Digitized from the orthophotographs. 1/95



Estimated Mean Actinide Concentrations and Yields at SW027

Pu = 3.00 pCi/L
 Am = 0.558 pCi/L

Pu = 1.35E+07 pCi
 Am = 2.51E+06 pCi

Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01

DISCLAIMER:
 Neither the United States Government nor Kaiser Hill Co., nor Dryden/RLC nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

State Plane Coordinate Projection
 Colorado Central Zone
 Datum: NAD27

U.S. Department of Energy
 Rocky Flats Environmental Technology Site

Figure 27
2-Year, 6-Hour, 40.8-mm Event

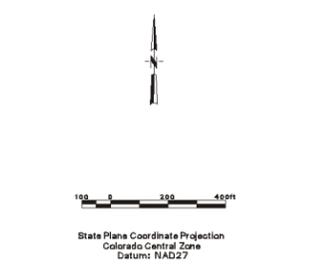
Pu-239,240 Mobility

South Interceptor Ditch
EXPLANATION

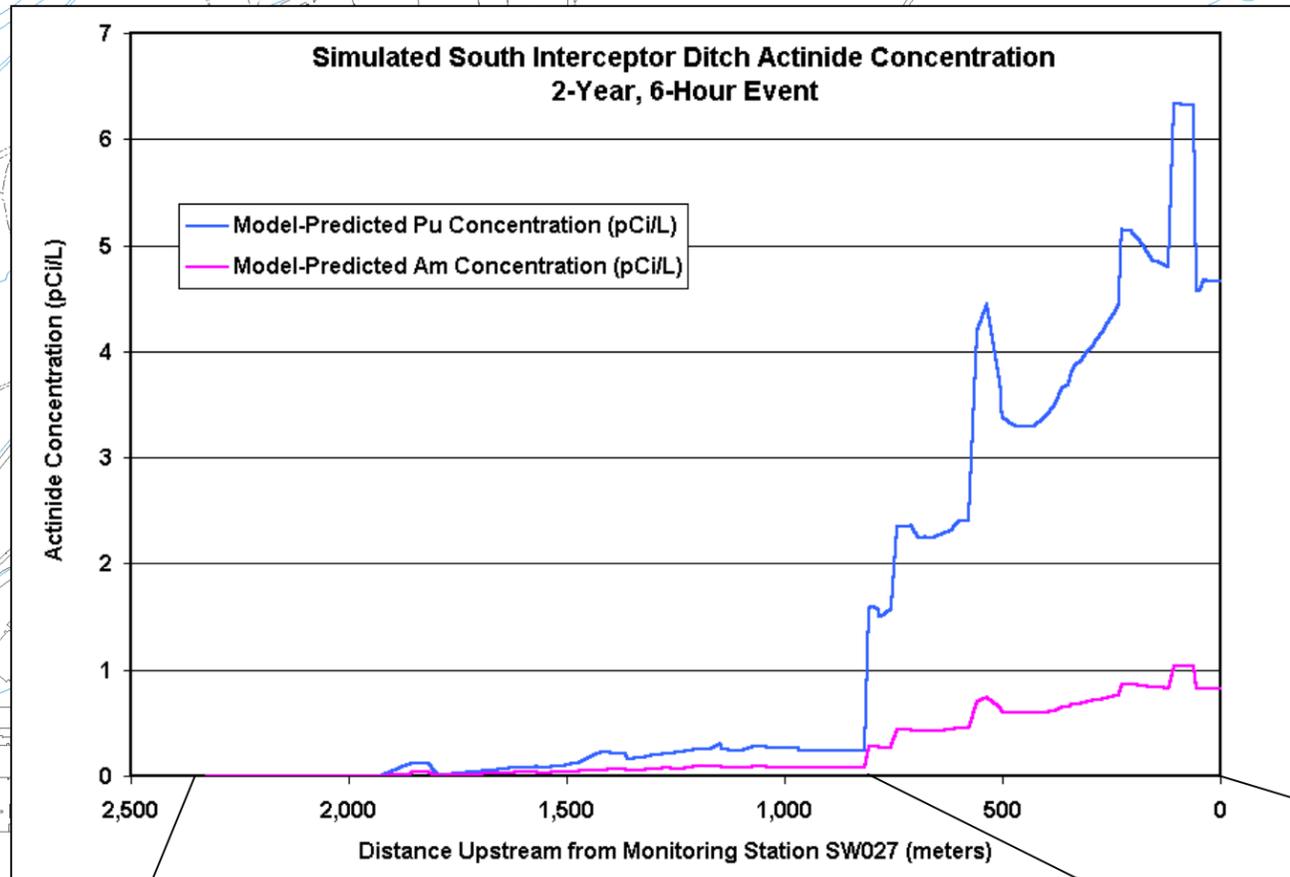
- Low
 -
 -
 -
 - Relative Actinide
 - Mobility Scale
 -
 -
 - High
- Standard Map Features**
- Solar Evaporation Ponds (SEPs)
 - Lakes and ponds
 - Streams, ditches, or other drainage features
 - Fences and other barriers
 - Rocky Flats boundary
 - Paved roads
 - Dirt roads

DATA SOURCE BASE FEATURES:
 Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95
 Buildings, fences, hydrography, roads and other structures from 2002 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95

DISCLAIMER:
 Neither the United States Government nor Kaiser Hill Co., nor Dryden/ABET, nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.



U.S. Department of Energy
 Rocky Flats Environmental Technology Site
 Kaiser Hill Company, L.L.C.
 Classification Exemption CEX-105-01



Estimated Actinide Concentrations and Yields at SW027

Pu = 4.66 pCi/L
 Am = 0.81 pCi/L

Pu = 3.66E+07 pCi
 Am = 6.43E+06 pCi

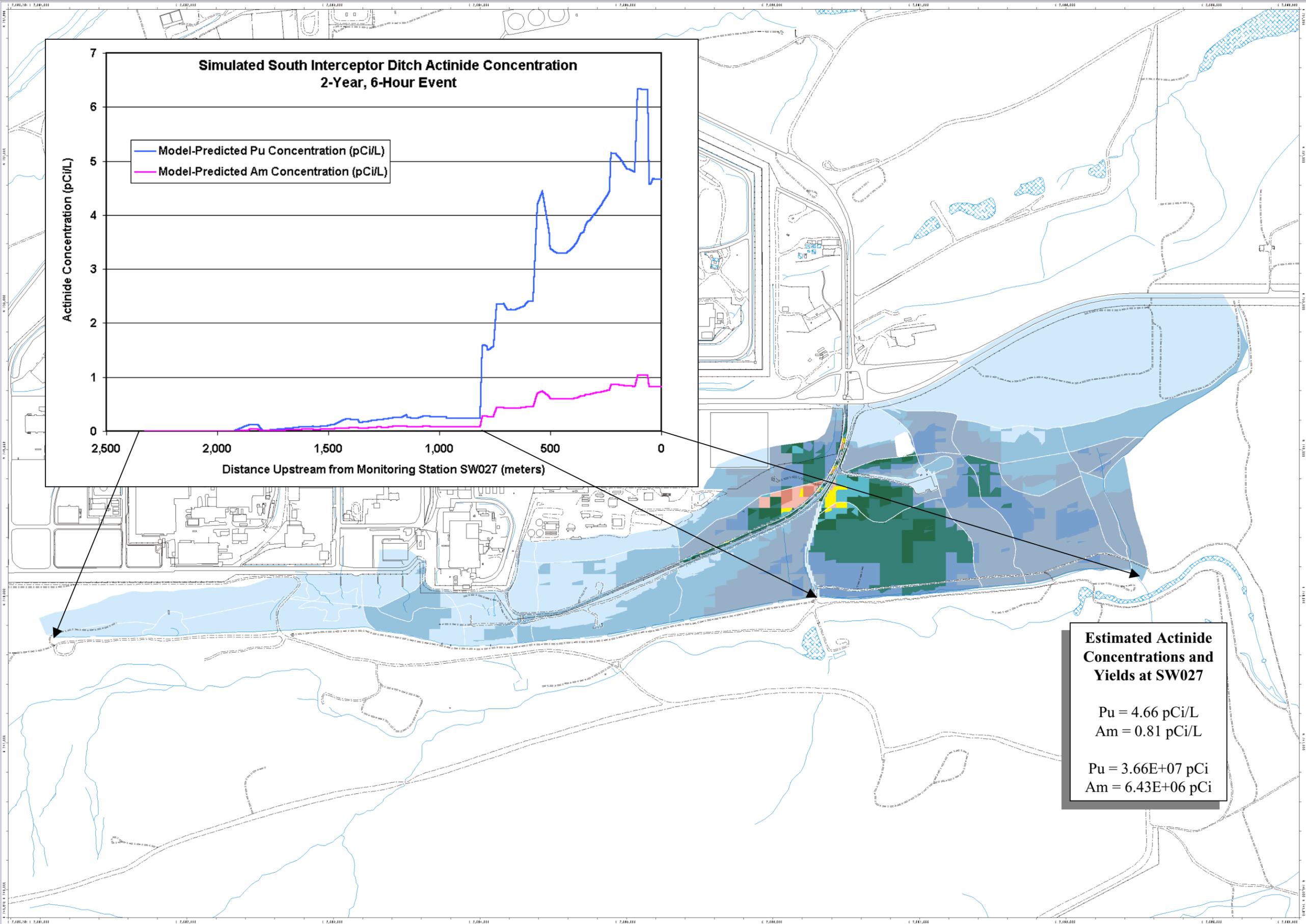


Figure 28

**10-Year, 6-Hour,
62.3-mm Event
Pu-239,240 Mobility**

**South Interceptor Ditch
EXPLANATION**

- Low
 -
 -
 - Relative Actinide
 - Mobility Scale
 -
 -
 - High
- Standard Map Features**
- Solar Evaporation Ponds (SEPs)
 - Lakes and ponds
 - Streams, ditches, or other drainage features
 - Fences and other barriers
 - Rocky Flats boundary
 - Paved roads
 - Dirt roads

DATA SOURCE BASE FEATURES:
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95
Buildings, fences, hydrography, roads and other structures from 1994 aerial fly-over data captured by EG&G RSL, Las Vegas. Digitized from the orthophotographs, 1/95

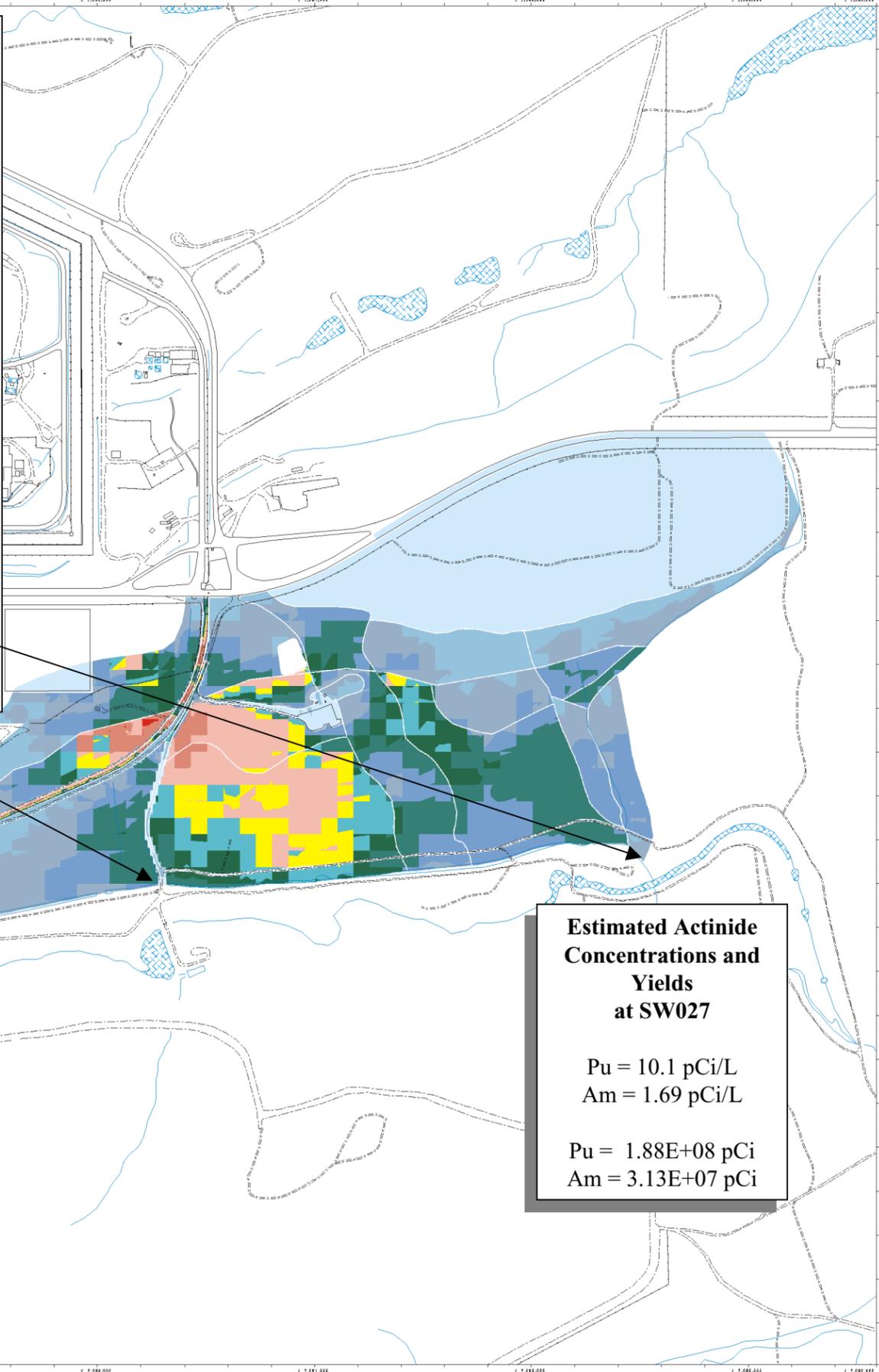
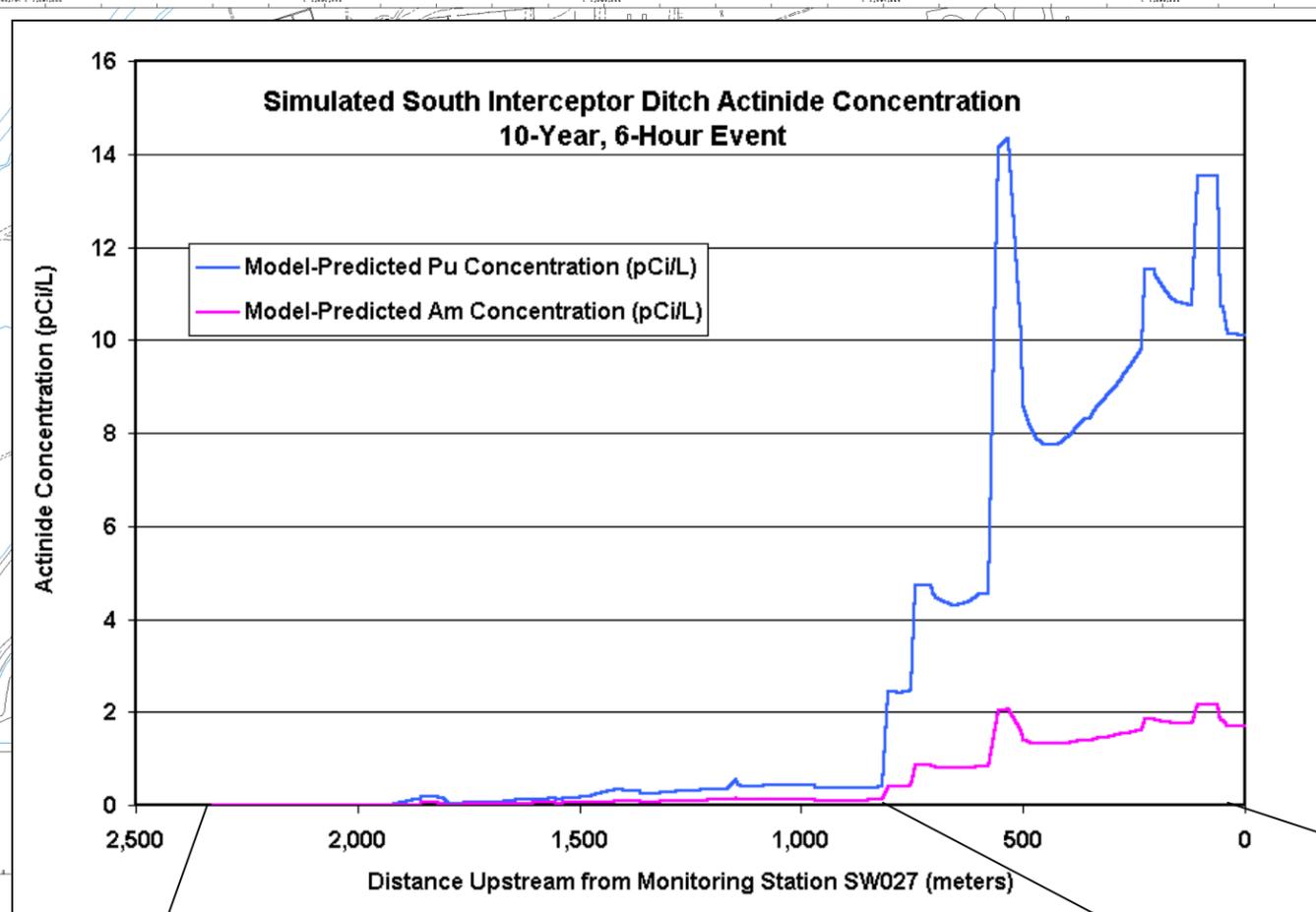
DISCLAIMER:
Neither the United States Government nor Kaiser Hill Co., nor EG&G RSL, nor any agency thereof, nor any of their employees, make any warranty, express or implied, or assume any liability or responsibility for the accuracy, completeness, or usefulness of any information, materials, products, or services disclosed, or represents that its use would not infringe privately owned rights.



100 0 200 400ft
State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Kaiser Hill Company, L.L.C.
Classification Exemption CEX-105-01

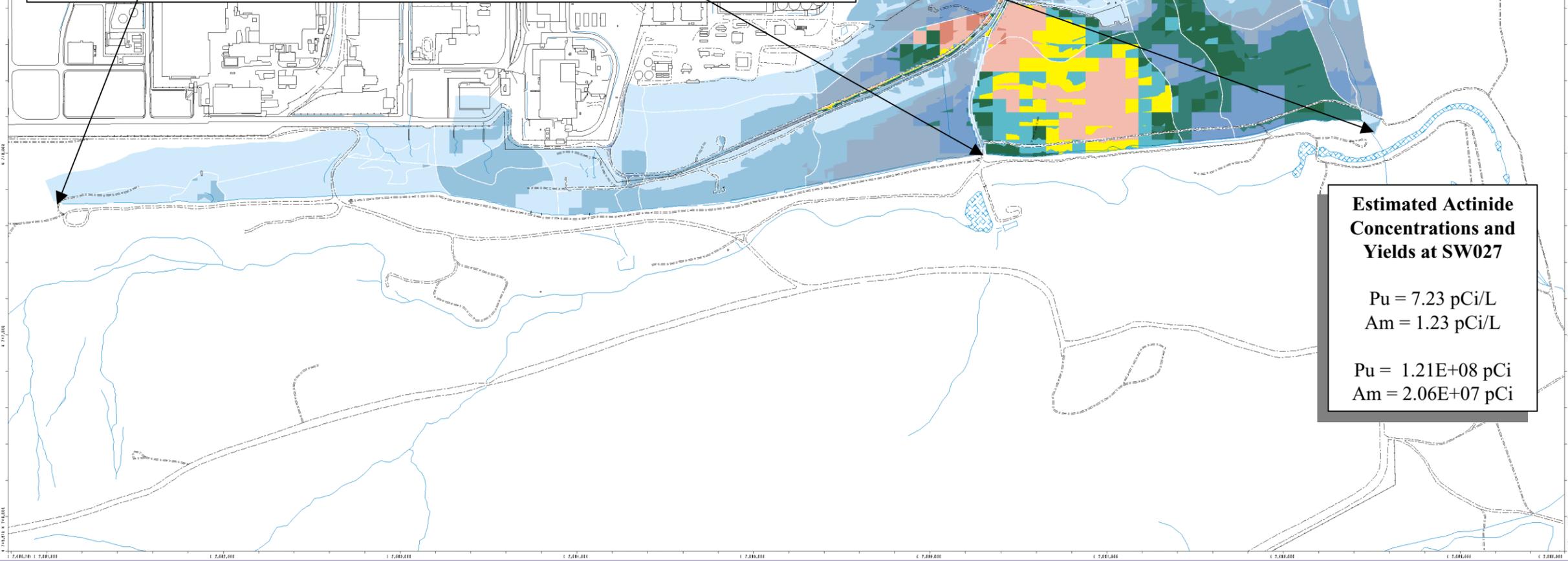
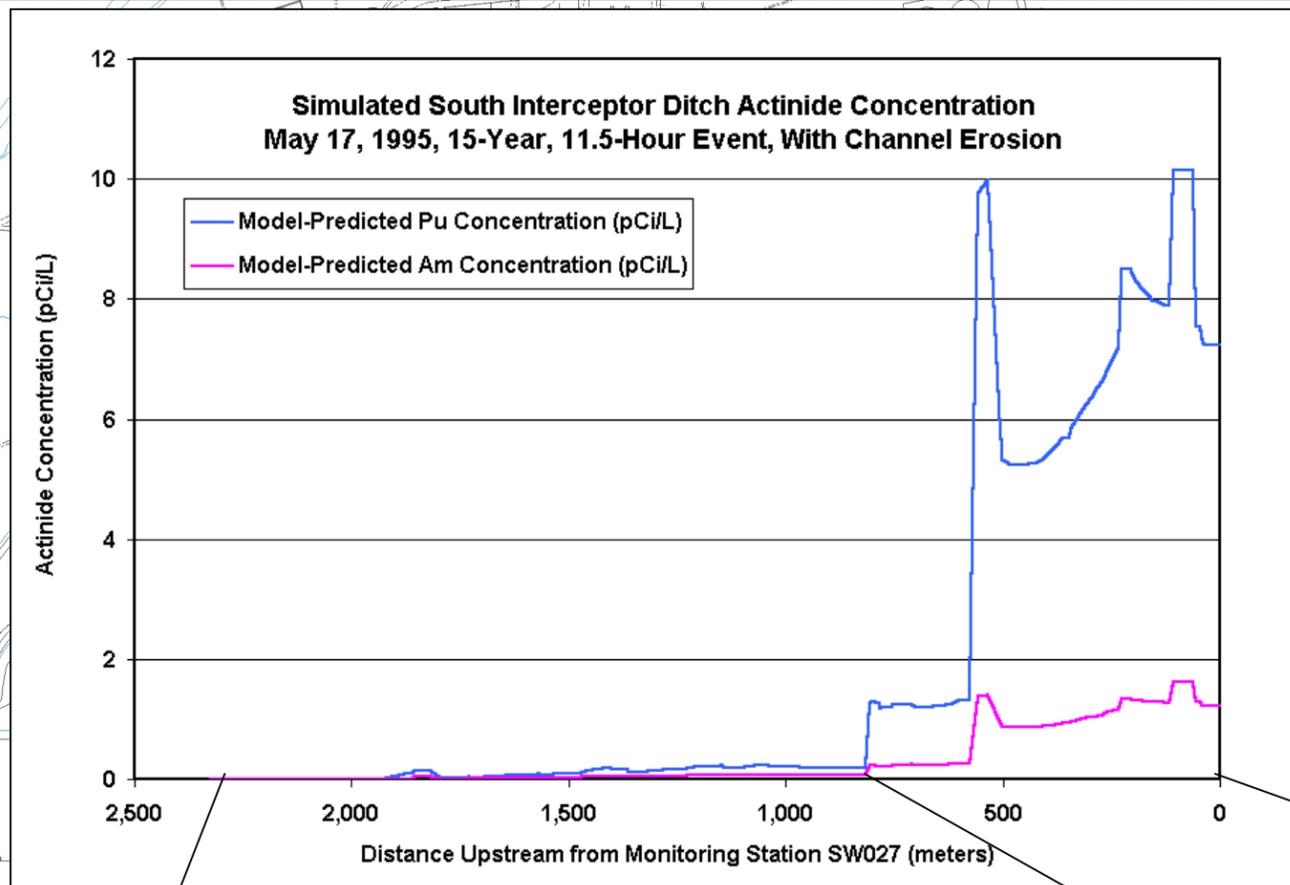


**Estimated Actinide
Concentrations and
Yields
at SW027**

Pu = 10.1 pCi/L
Am = 1.69 pCi/L

Pu = 1.88E+08 pCi
Am = 3.13E+07 pCi

Figure 29
May 17, 1995 Event
Pu-239,240 Mobility
South Interceptor Ditch



NT_Svr_d:\projects\fy2001\01-0847\sid_pu_mob_m2_may17.am

Figure 30

**100-Year, 6-Hour,
97.1-mm Event**

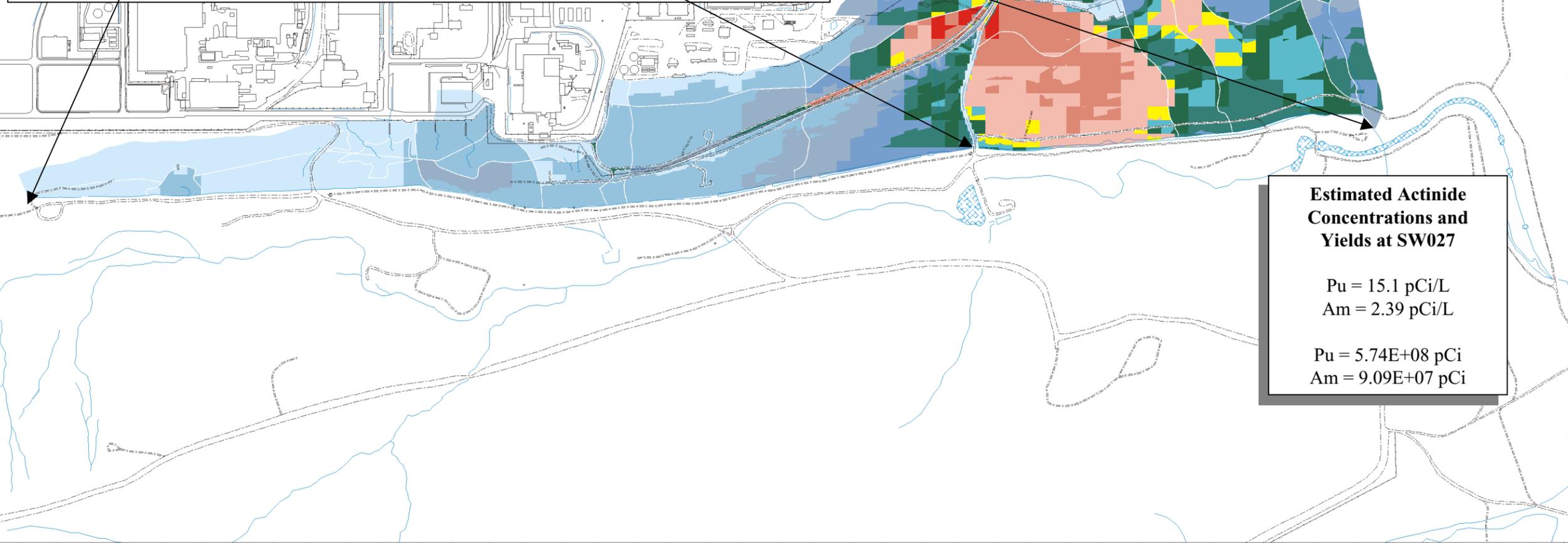
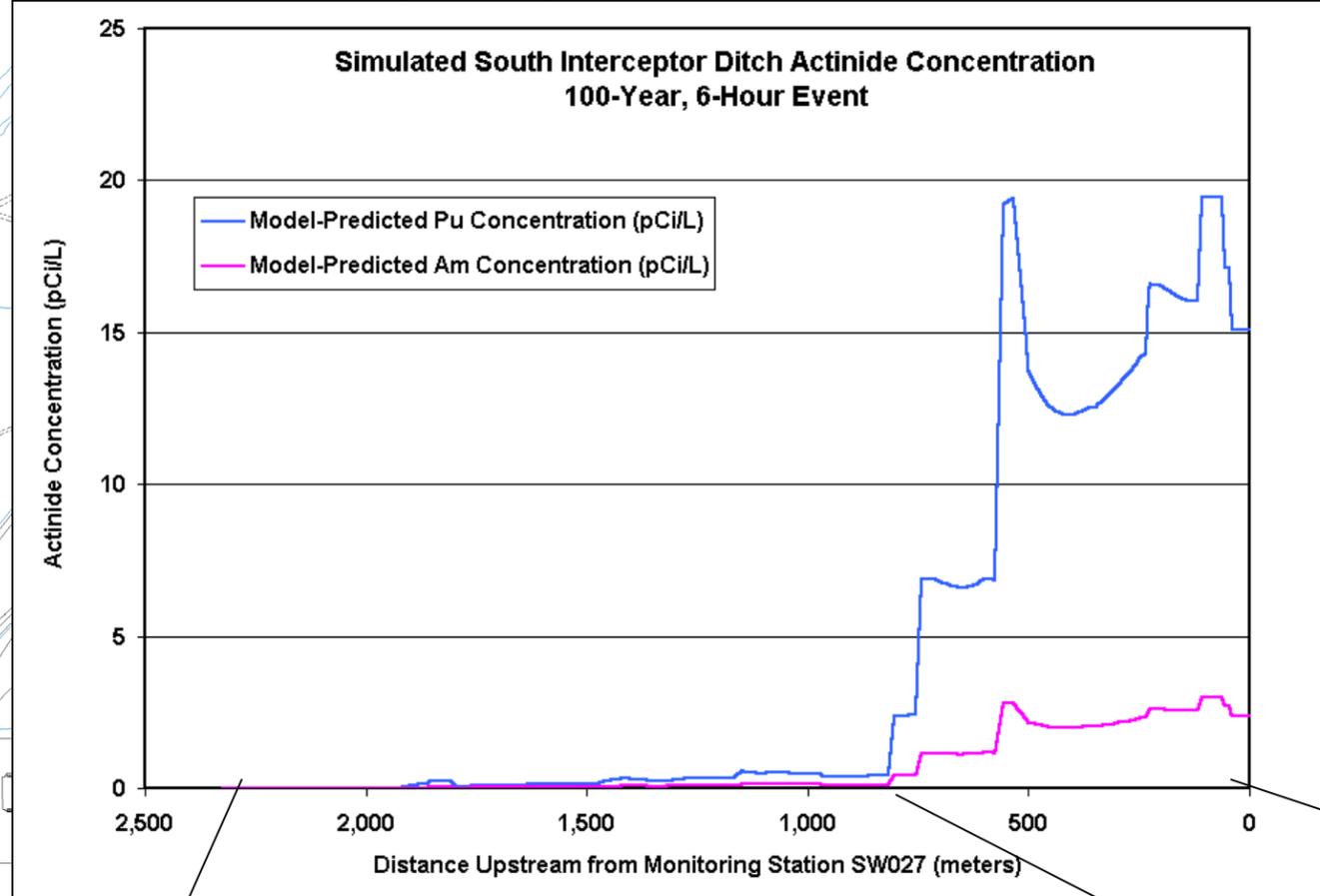
Pu-239,240 Mobility

South Interceptor Ditch
EXPLANATION

- Low
- Relative Actinide
- Mobility Scale
- High

- Standard Map Features**
- Solar Evaporation Ponds (SEPs)
 - Lakes and ponds
 - Streams, ditches, or other drainage features
 - Fences and other barriers
 - Rocky Flats boundary
 - Paved roads
 - Dirt roads

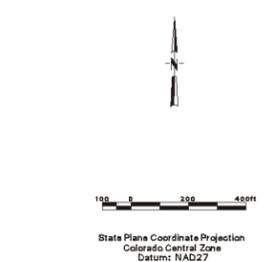
DATA SOURCE BASE FEATURES:
Buildings, fences, hydrography, roads and other structures from USGS aerial fly-over data captured by EGA GRS, Las Vegas. Digitized from the orthophotographs. 1/95
Data Source:
Mobility data - Approved by Win Chromac (RMRS, 303-966-4535).



**Estimated Actinide
Concentrations and
Yields at SW027**

Pu = 15.1 pCi/L
Am = 2.39 pCi/L

Pu = 5.74E+08 pCi
Am = 9.09E+07 pCi

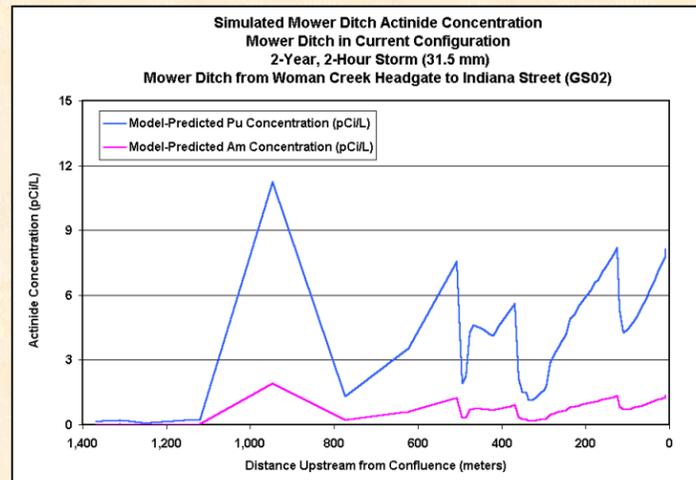


U.S. Department of Energy
Rocky Flats Environmental Technology Site

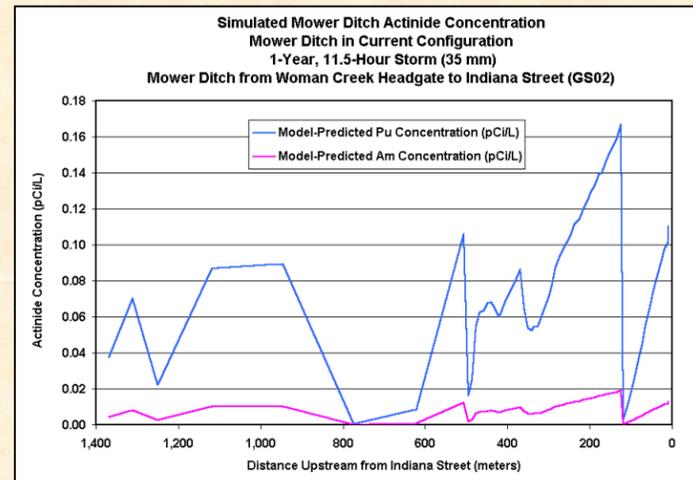
Kaiser Hill Company, L.L.C.
Classification Exemption CEX-105-01

Figure 31. Mower Ditch - Model-predicted Surface Water Pu and Am Concentrations for 6 Storm Events

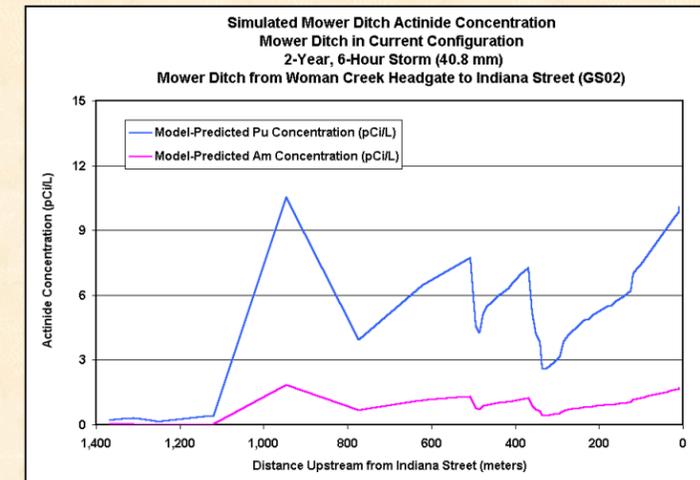
2-Year, 2-Hour Storm (31.5 mm)



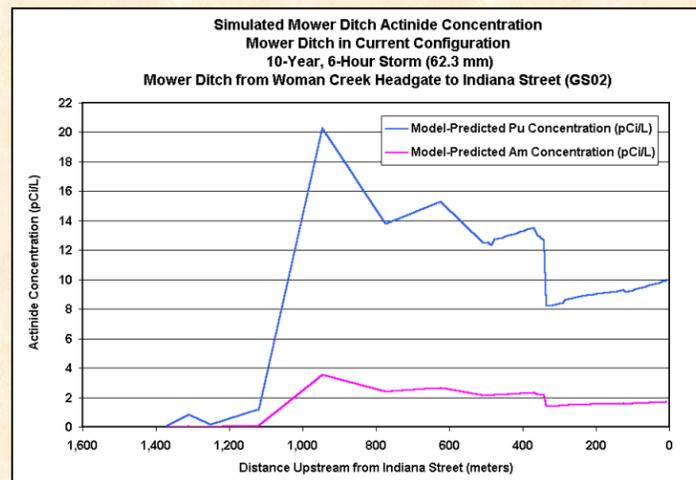
1-Year, 11.5-Hour Storm (35 mm)



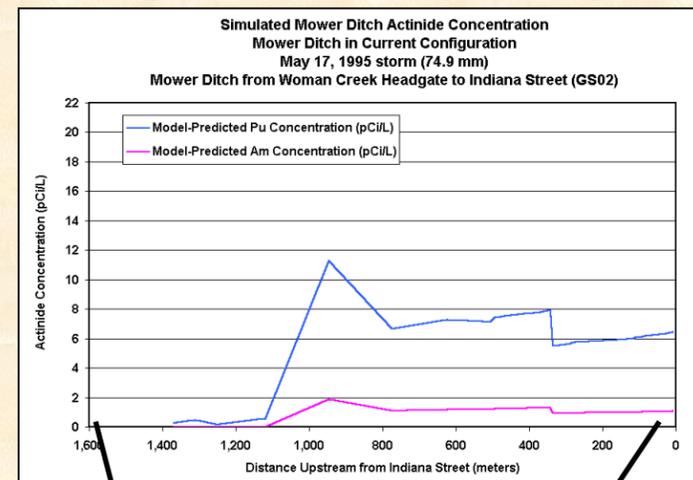
2-Year, 6-Hour Storm (40.8 mm)



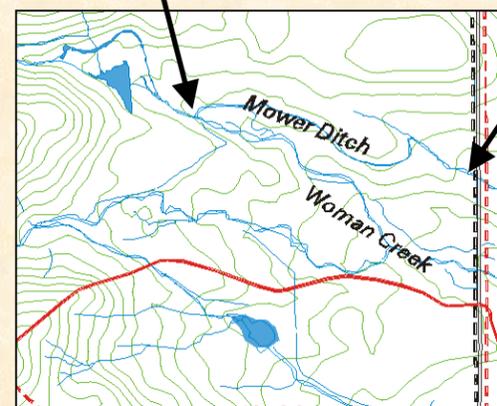
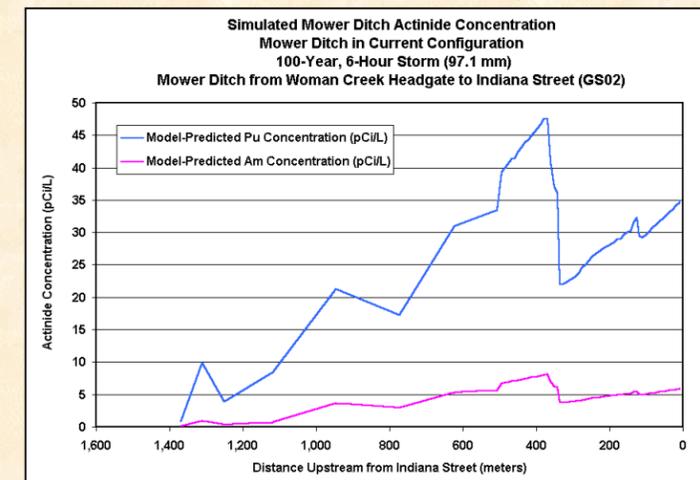
10-Year, 6-Hour Storm (62.3 mm)



May 17, 1995 Storm (74.9 mm)



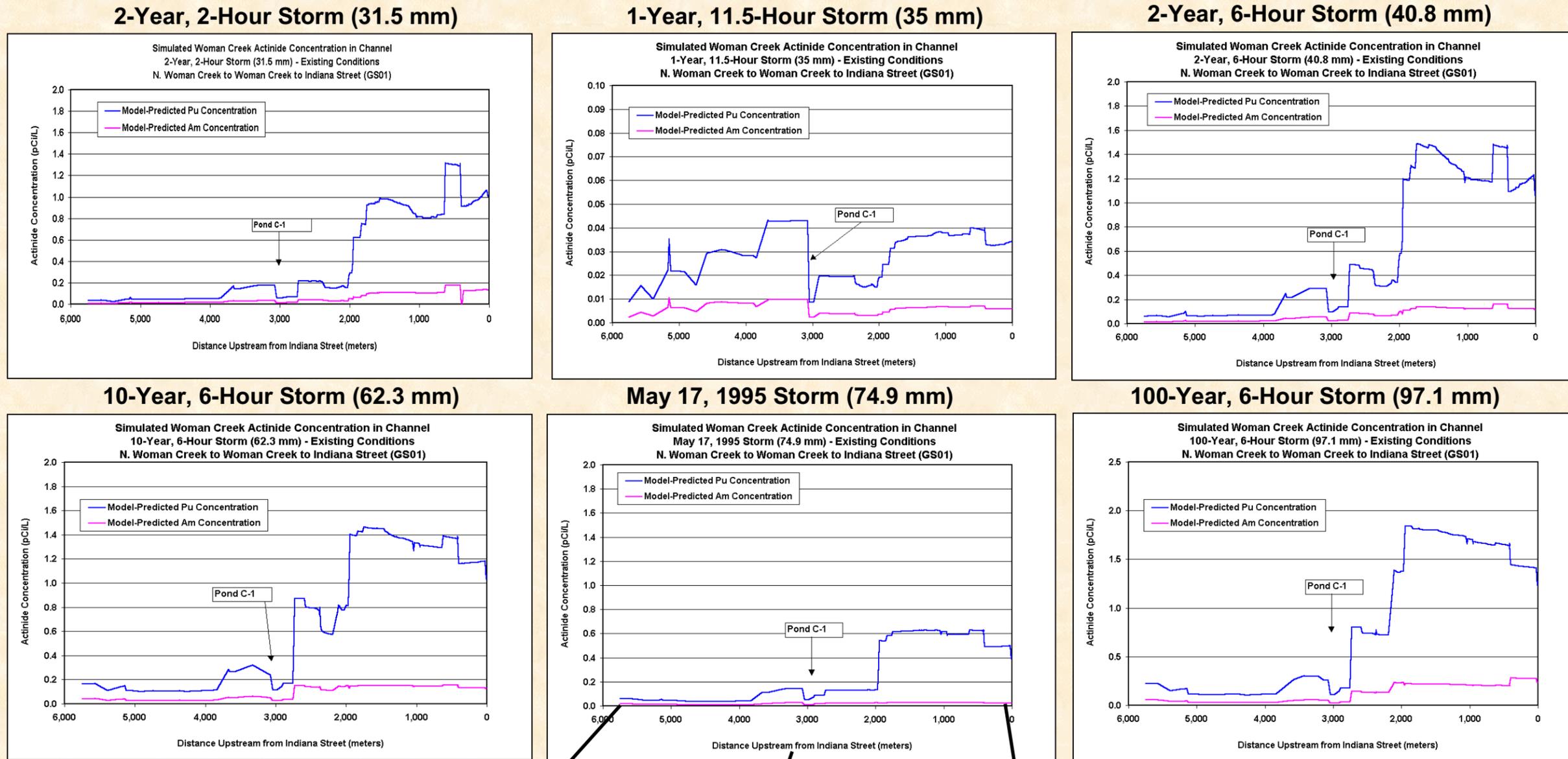
100-Year, 6-Hour Storm (97.1 mm)



Mower Ditch Location Reference

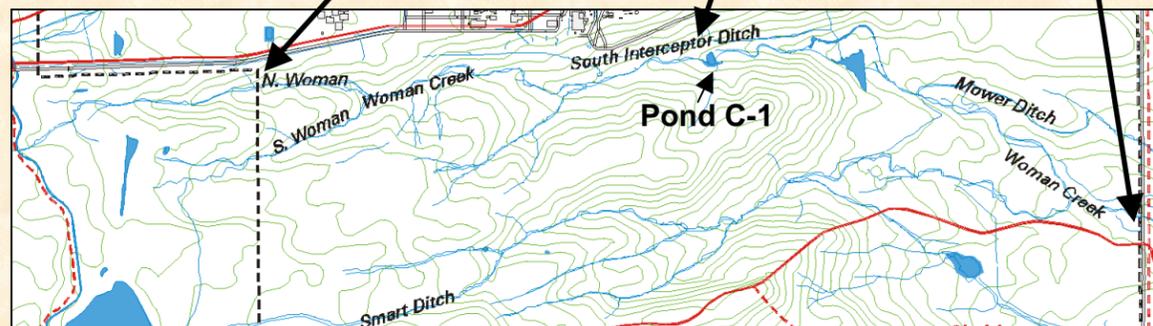
Mower Ditch Scenarios	Estimated Pu Yield (pCi)	Estimated Am Yield (pCi)
2-Year 2-Hour (31.5mm)	6.99E+06	1.15E+06
1-Year 11.5-Hour (35mm)	1.08E+05	1.25E+04
2-Year 6-Hour (40.8mm)	2.22E+07	3.75E+06
10-Year 6-Hour (62.3mm)	8.54E+07	1.46E+07
5/17/2001 (74.9mm)	8.72E+07	1.45E+07
100-Year 6-Hour (97.1mm)	9.28E+08	1.58E+08

Figure 32. Woman Creek - Model-predicted Surface Water Pu and Am Concentrations for 6 Storm Events



Kaiser Hill Company, L.L.C.
Classification Exemption CEX-105-01

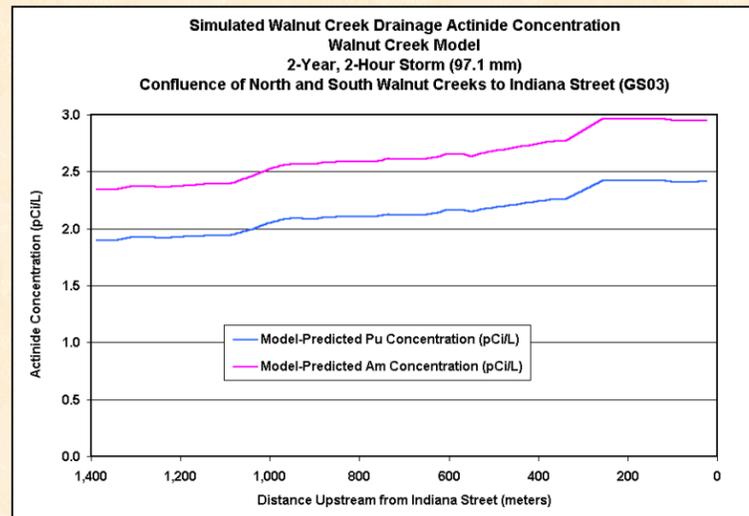
**Woman Creek
Location Reference**



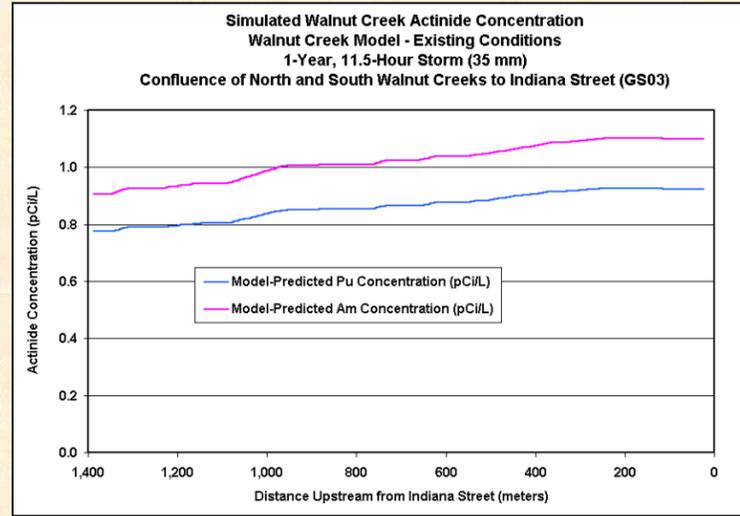
Woman Creek Scenarios	Estimated Pu Yield (pCi)	Estimated Am Yield (pCi)
2-Year 2-Hour (31.5mm)	8.23E+06	1.09E+06
1-Year 11.5-Hour (35mm)	4.97E+05	8.46E+04
2-Year 6-Hour (40.8mm)	1.41E+07	1.53E+06
10-Year 6-Hour (62.3mm)	5.08E+07	6.04E+06
5/17/2001 (74.9mm)	2.87E+07	1.81E+06
100-Year 6-Hour (97.1mm)	1.80E+08	3.38E+07

Figure 33. Lower Walnut Creek - Model-Predicted Surface Water Pu and Am Concentrations for 6 Storm Events

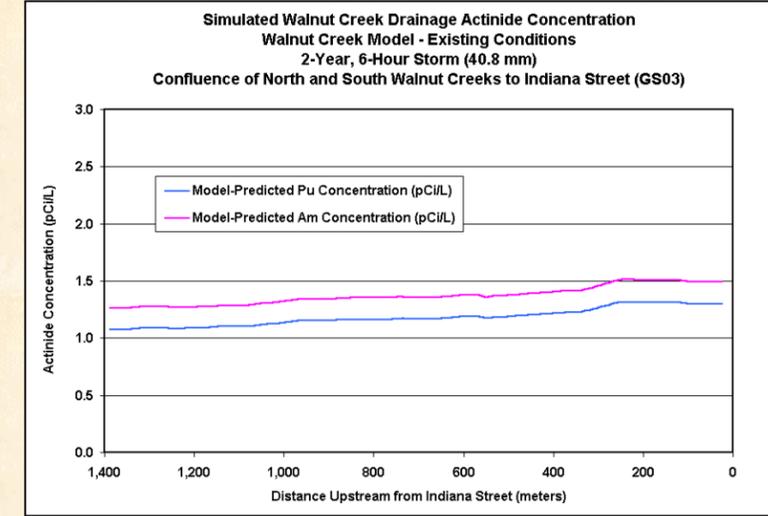
2-Year, 2-Hour Storm (31.5 mm)



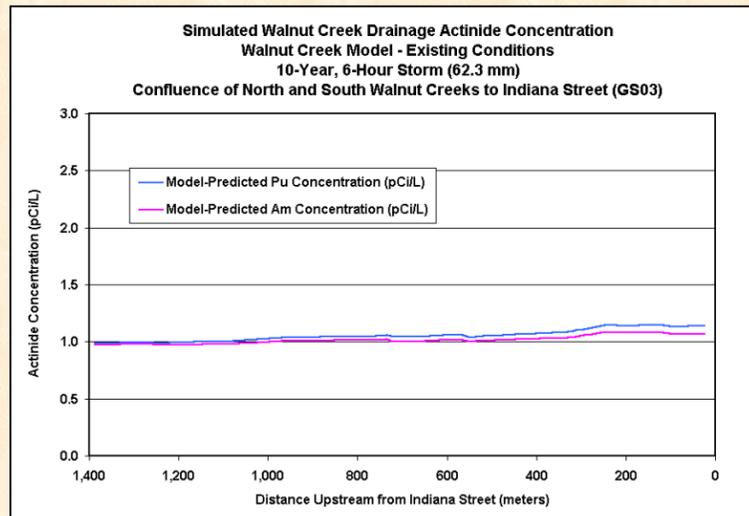
1-Year, 11.5-Hour Storm (35 mm)



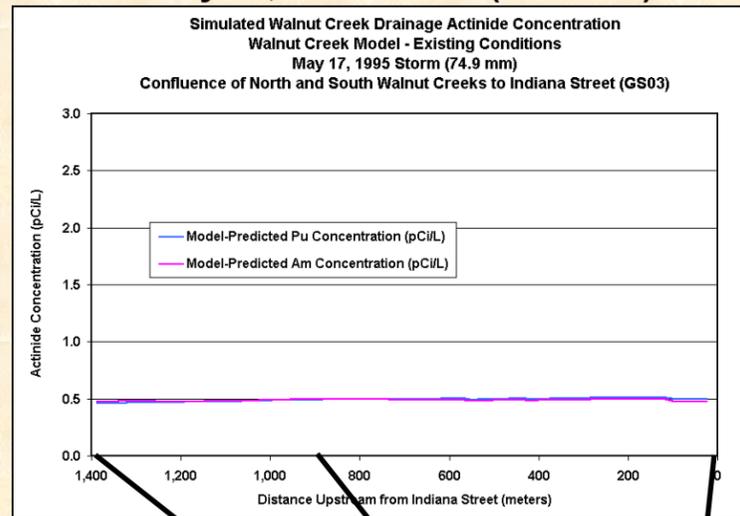
2-Year, 6-Hour Storm (40.8 mm)



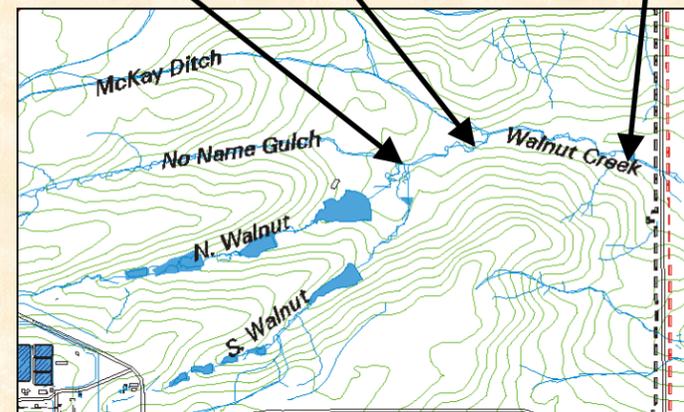
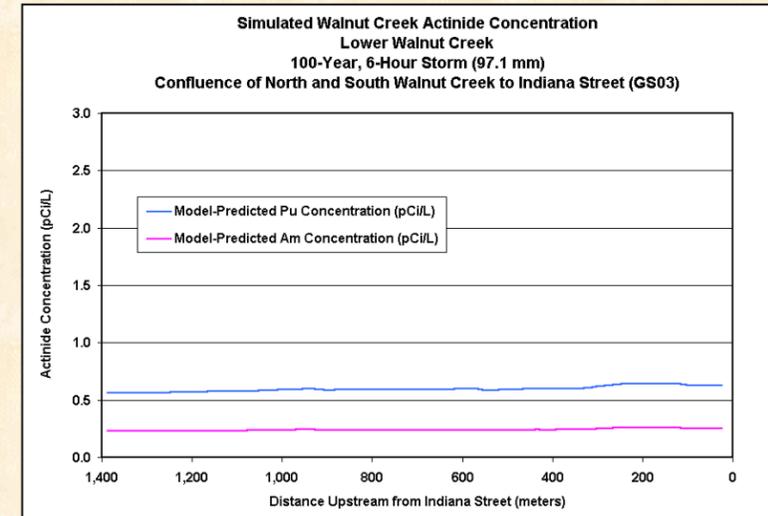
10-Year, 6-Hour Storm (62.3 mm)



May 17, 1995 Storm (74.9 mm)



100-Year, 6-Hour Storm (97.1 mm)

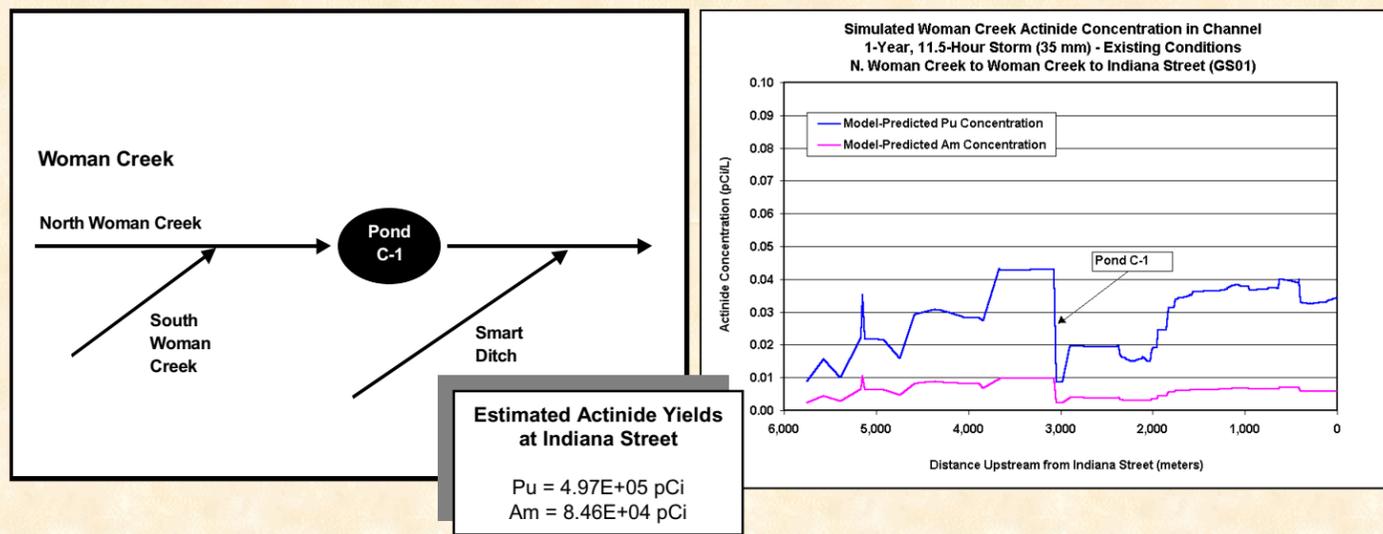


Lower Walnut Creek Location Reference

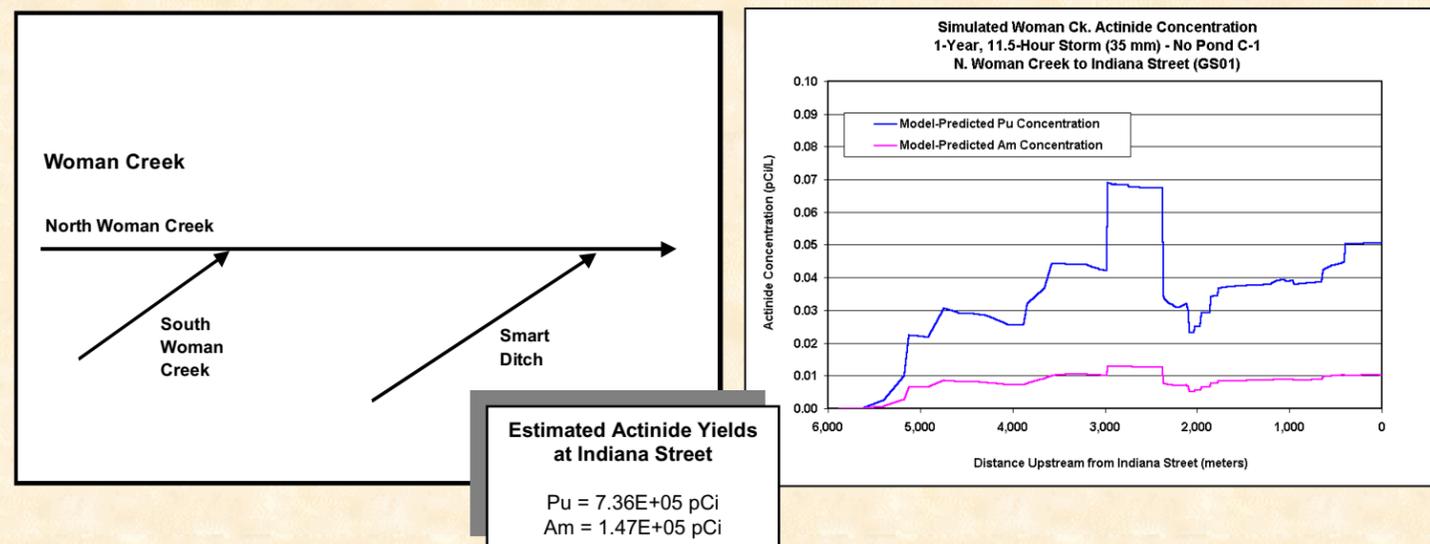
Walnut Creek Scenarios	Estimated Pu Yield (pCi)	Estimated Am Yield (pCi)
2-Year 2-Hour (31.5mm)	1.04E+08	1.27E+08
1-Year 11.5-Hour (35mm)	4.44E+07	5.28E+07
2-Year 6-Hour (40.8mm)	8.01E+07	9.19E+07
10-Year 6-Hour (62.3mm)	1.01E+08	9.46E+07
5/17/2001 (74.9mm)	8.01E+07	7.66E+07
100-Year 6-Hour (97.1mm)	1.60E+08	6.43E+07

Figure 34. Woman Creek - 3 Configuration Alternatives Model-predicted Pu and Am Surface Water Concentrations in Woman Creek - 1-Year, 11.5 hour Storm (35-mm)

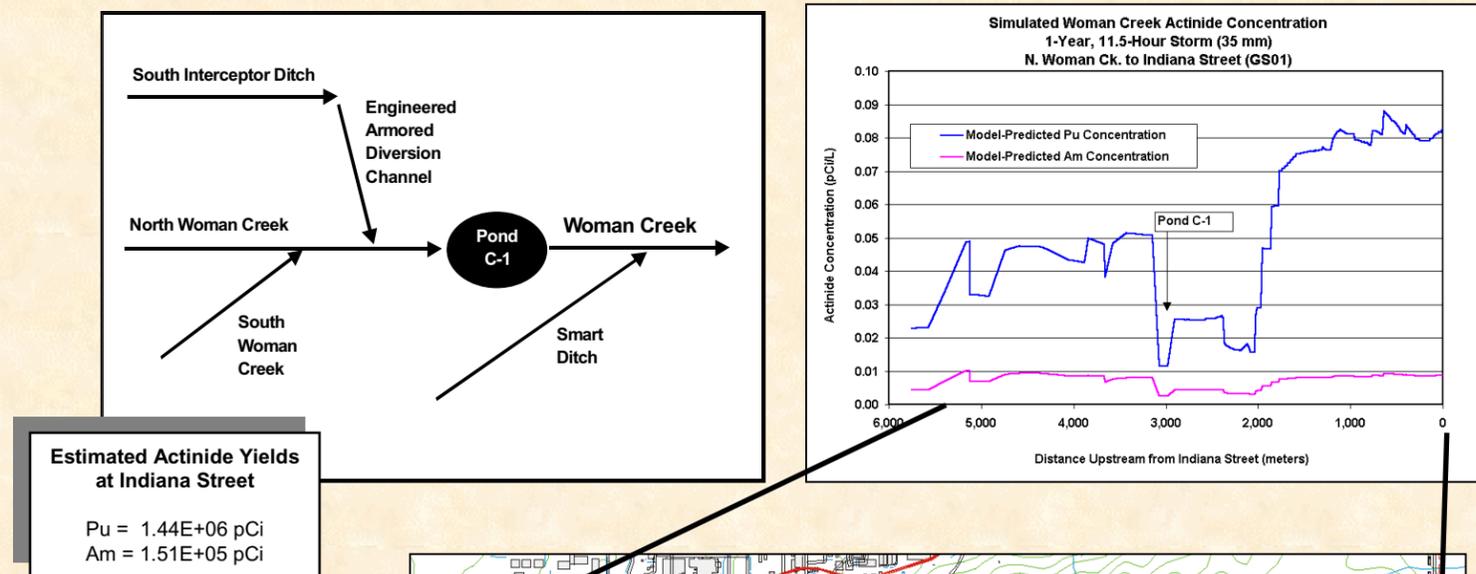
Woman Creek: Current Configuration



Woman Creek: Pond C-1 Removed



Woman Creek: South Interceptor Ditch Routed Into Woman Creek



Woman Creek Location Reference

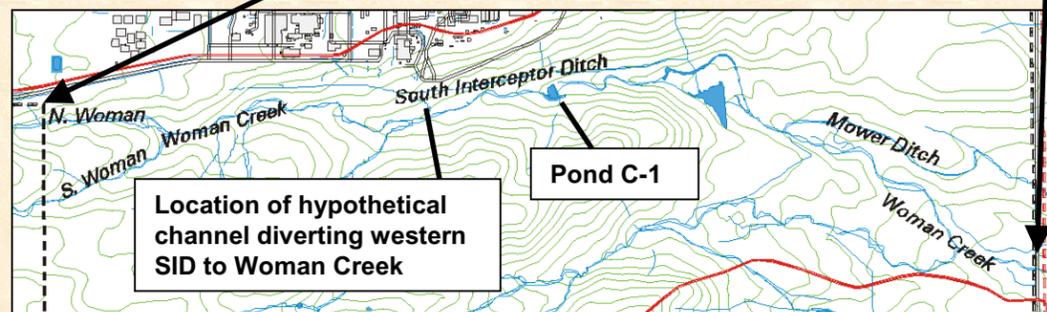
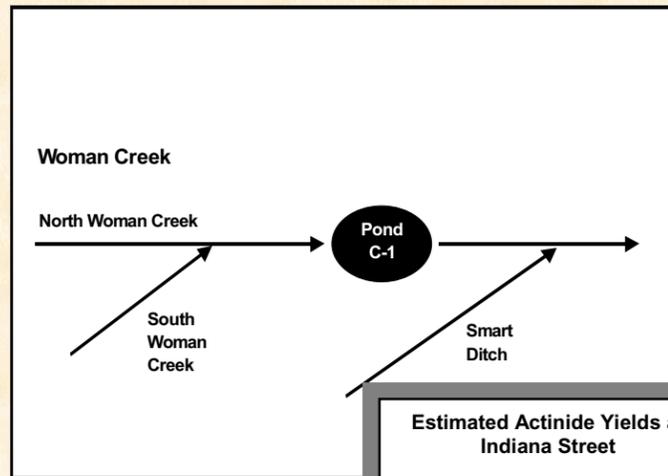


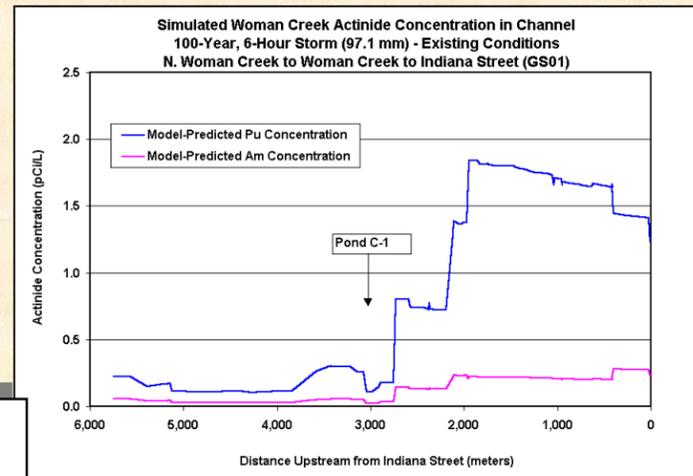
Figure 35. Woman Creek - 3 Configuration Alternatives Model-predicted Pu and Am Surface Water Concentrations in Woman Creek 100-Year, 6-Hour Storm (97.1-mm)

Woman Creek: Current Configuration

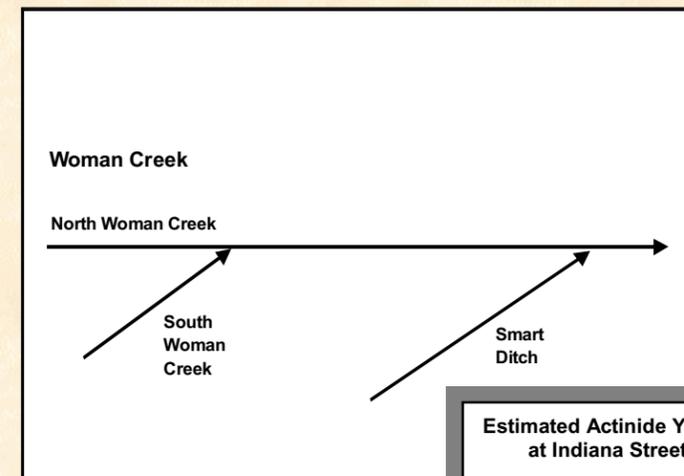


Estimated Actinide Yields at Indiana Street

Pu = 1.80E+08 pCi
Am = 3.38E+07 pCi

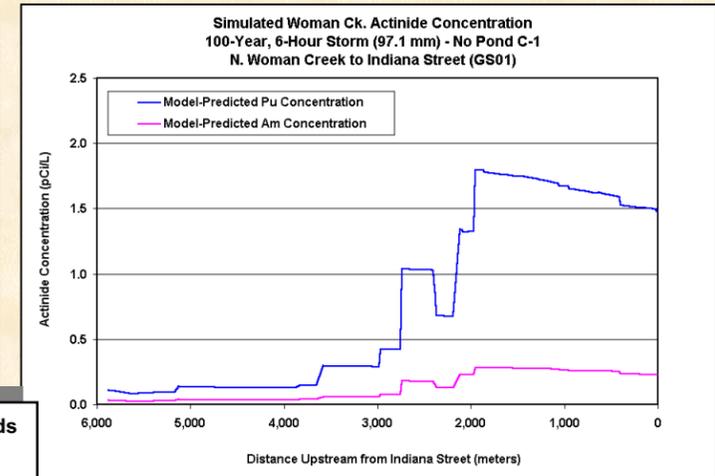


Woman Creek: Pond C-1 Removed

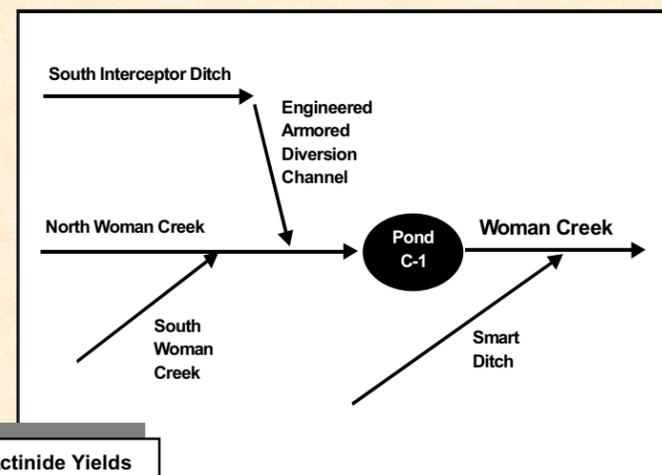


Estimated Actinide Yields at Indiana Street

Pu = 2.17E+08 pCi
Am = 3.32E+07 pCi

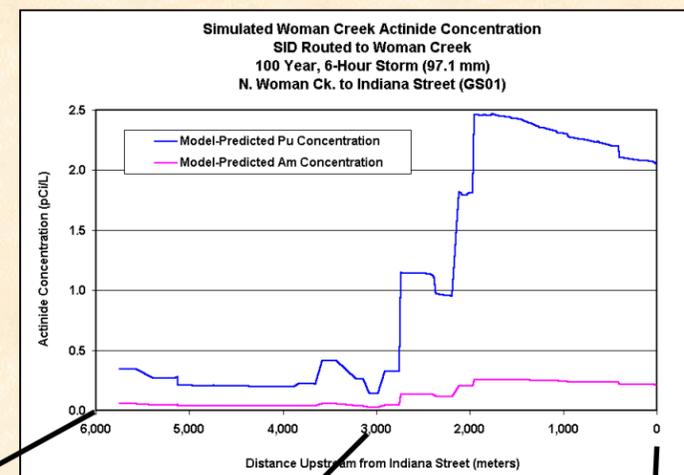


Woman Creek: South Interceptor Ditch Routed Into Woman Creek



Estimated Actinide Yields at Indiana Street

Pu = 3.31E+08 pCi
Am = 3.41E+07 pCi



Woman Creek Location Reference

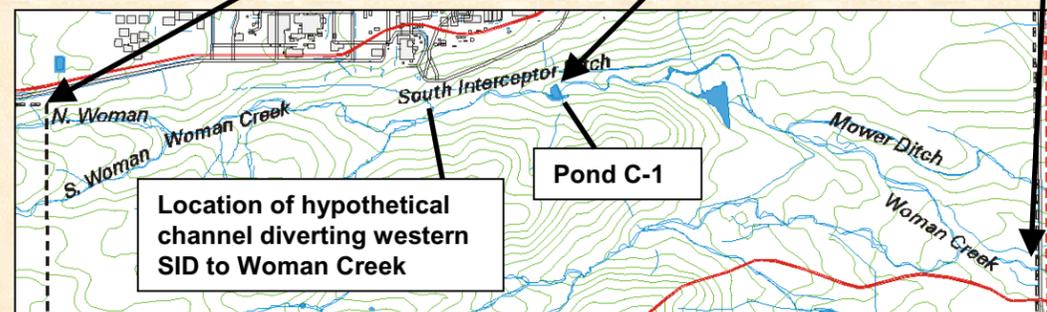
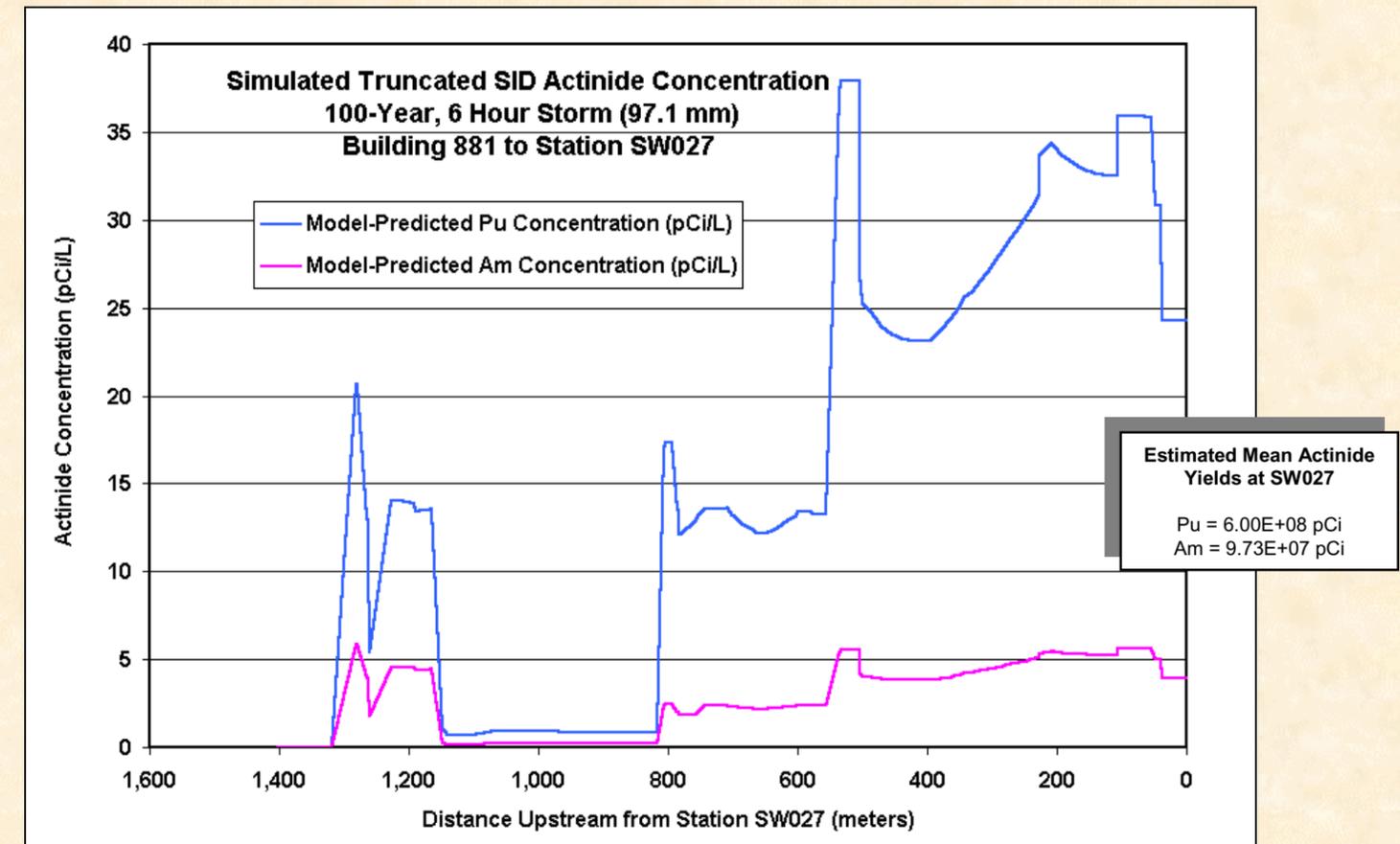
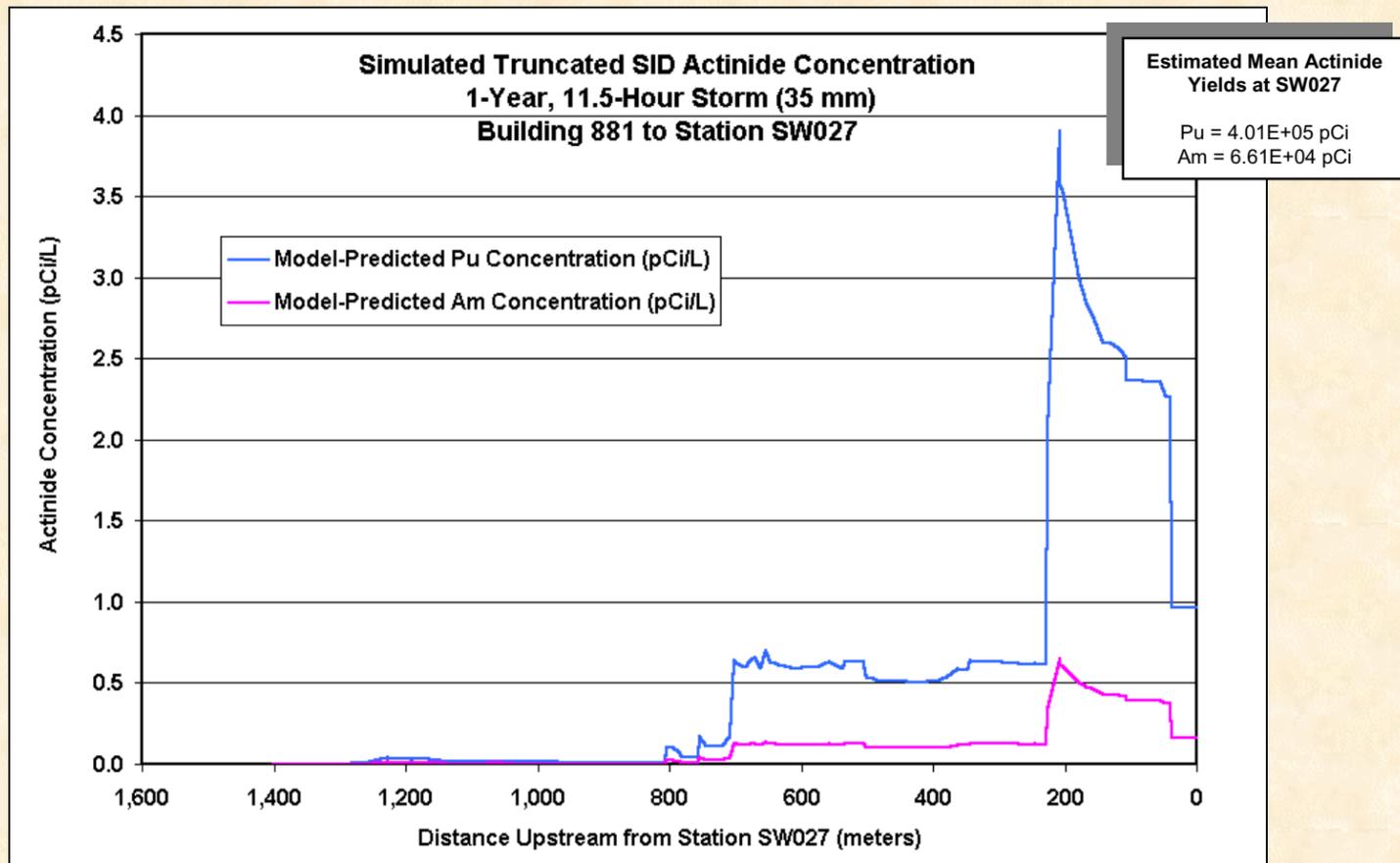
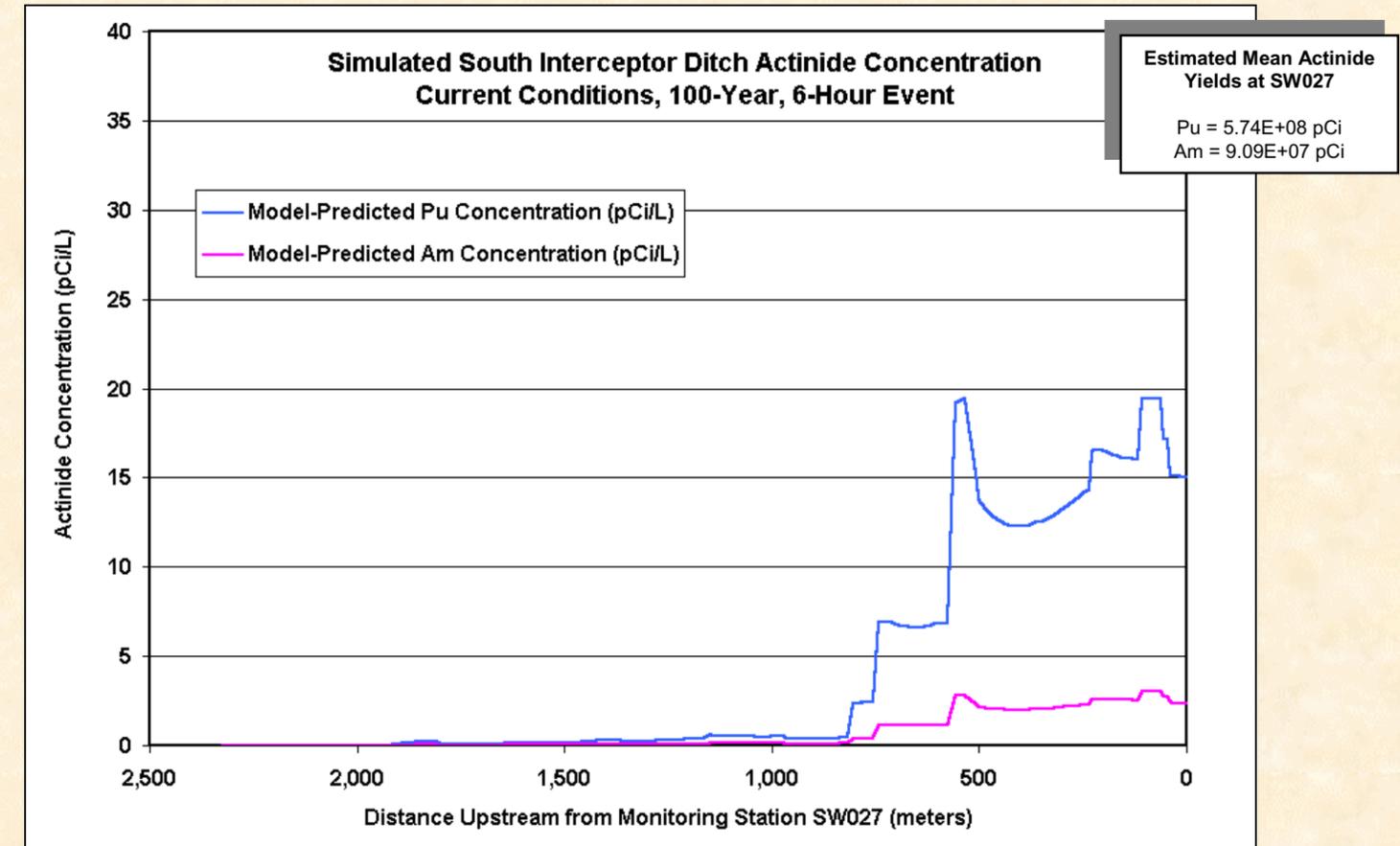
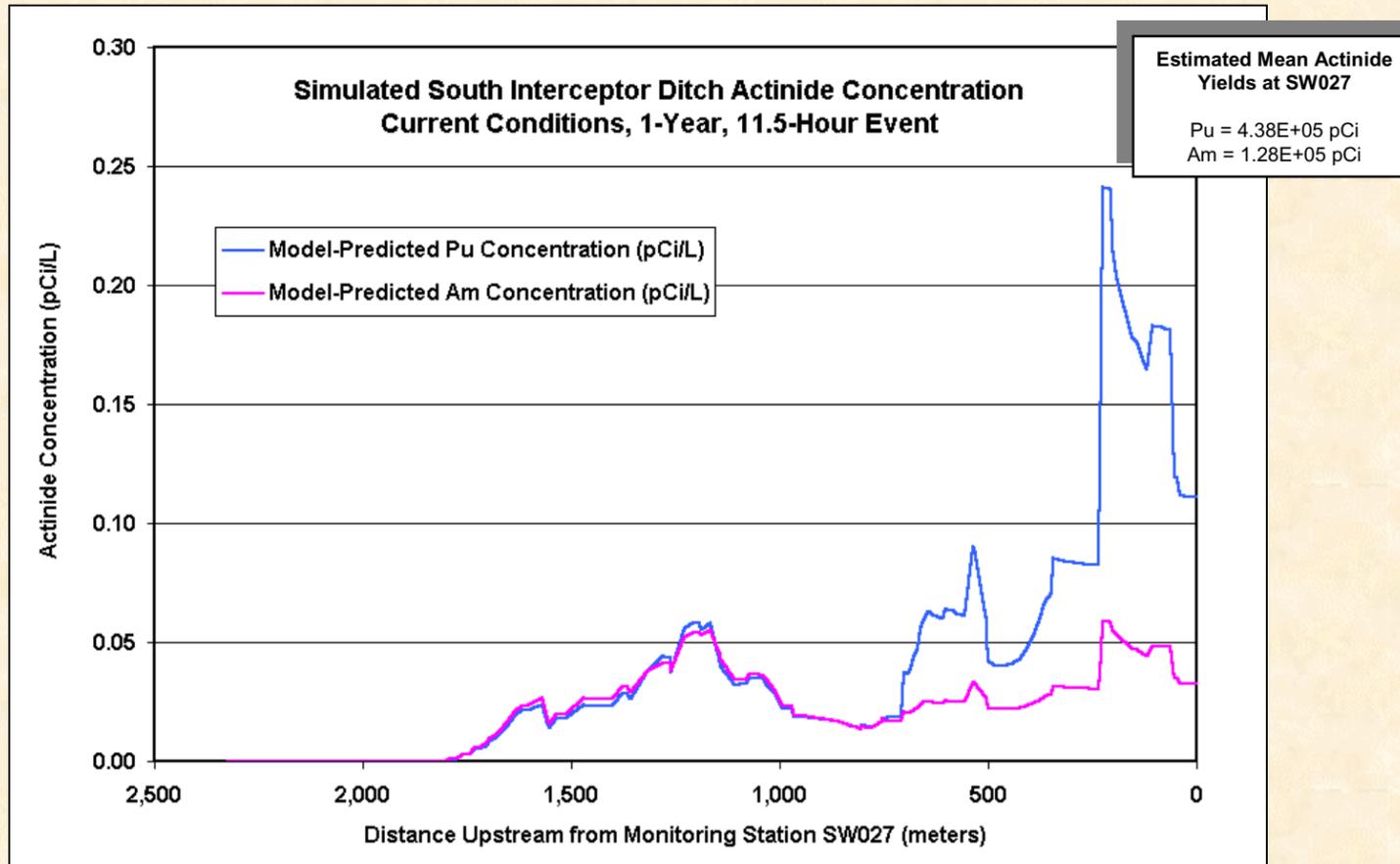
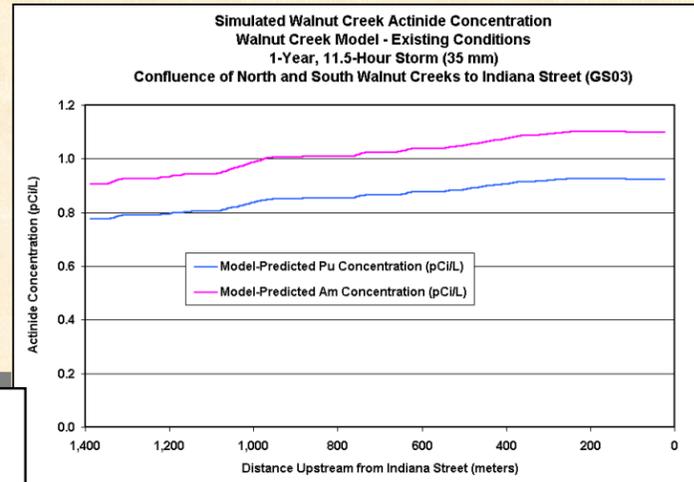
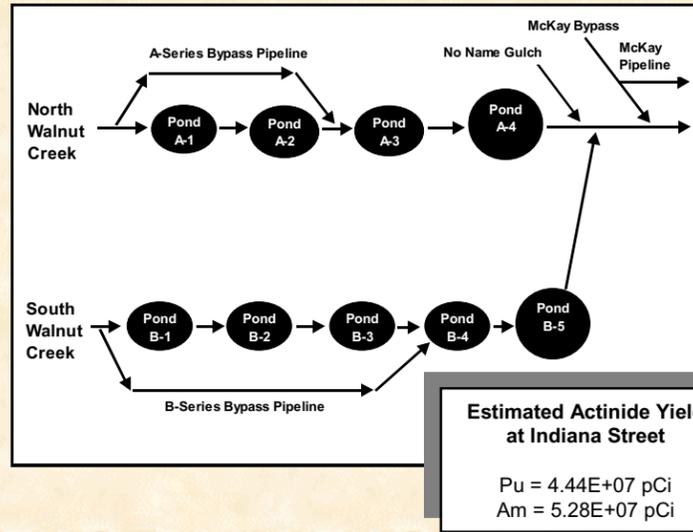


Figure 36. Comparison of Simulated Actinide Concentrations for Truncated SID



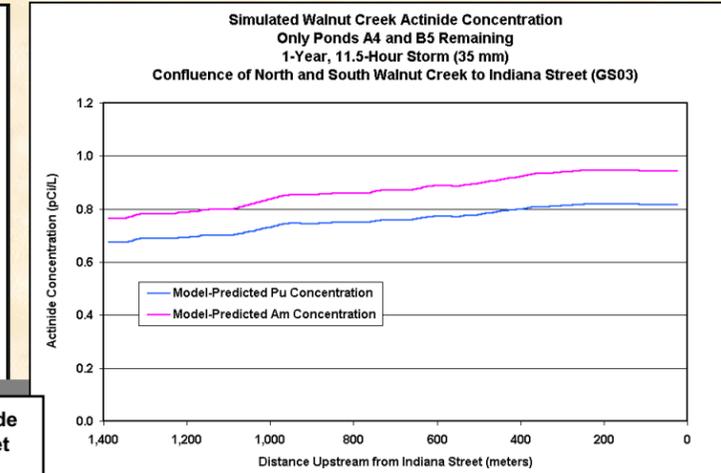
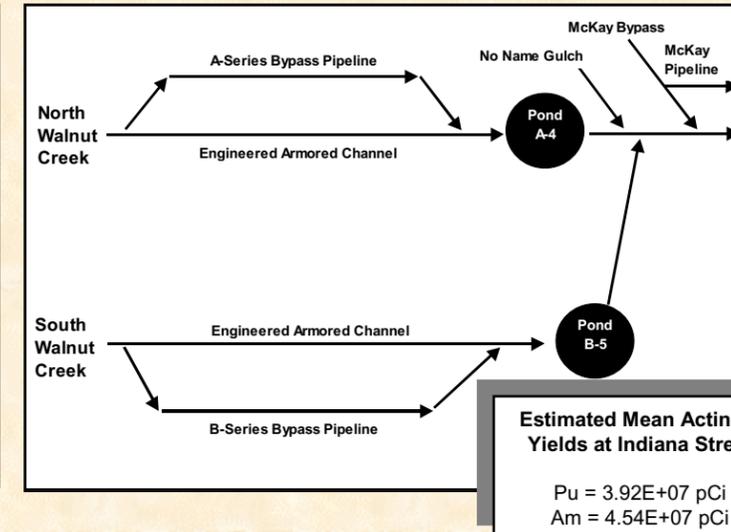
**Figure 37. Walnut Creek - 4 Pond Configuration Alternatives
Model-predicted Pu and Am
Surface Water Concentrations in
Lower Walnut Creek - 1-Year, 11.5
hour Storm (35-mm)**

Walnut Creek: Current Pond Configuration



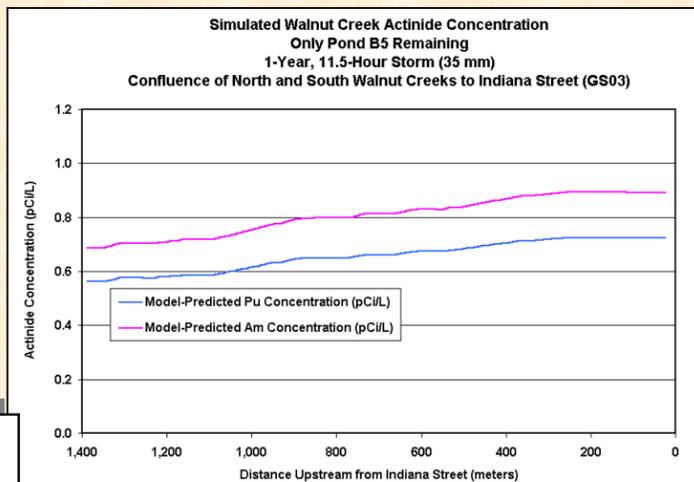
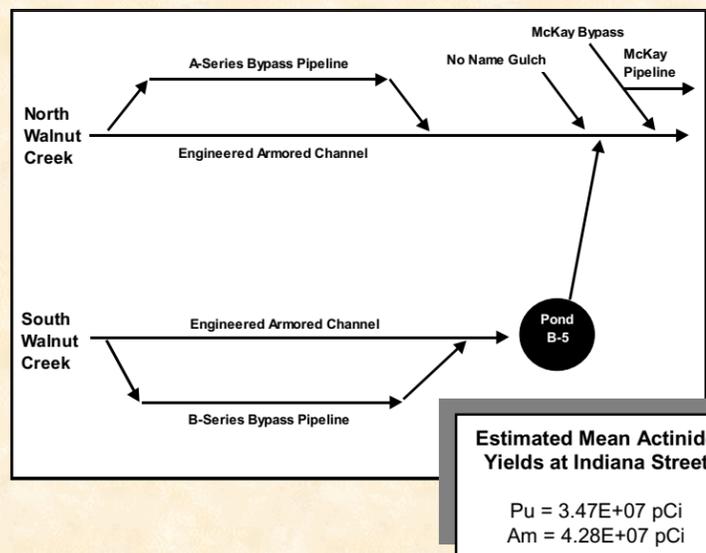
Estimated Actinide Yield at Indiana Street
Pu = 4.44E+07 pCi
Am = 5.28E+07 pCi

Walnut Creek: Only Pond A-4 and B-5 Remain



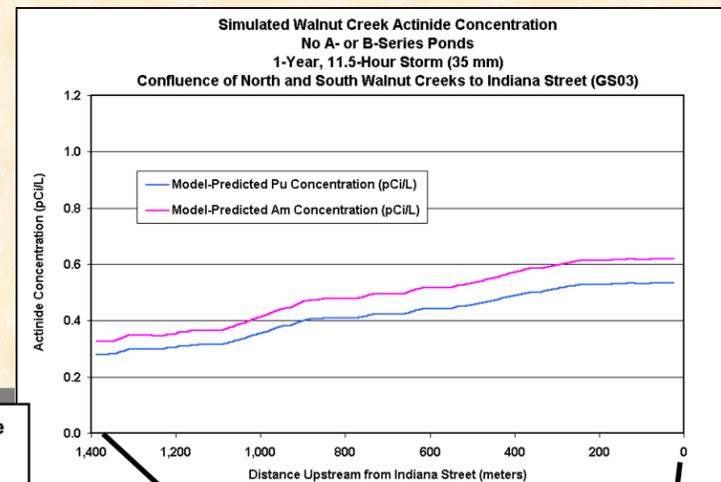
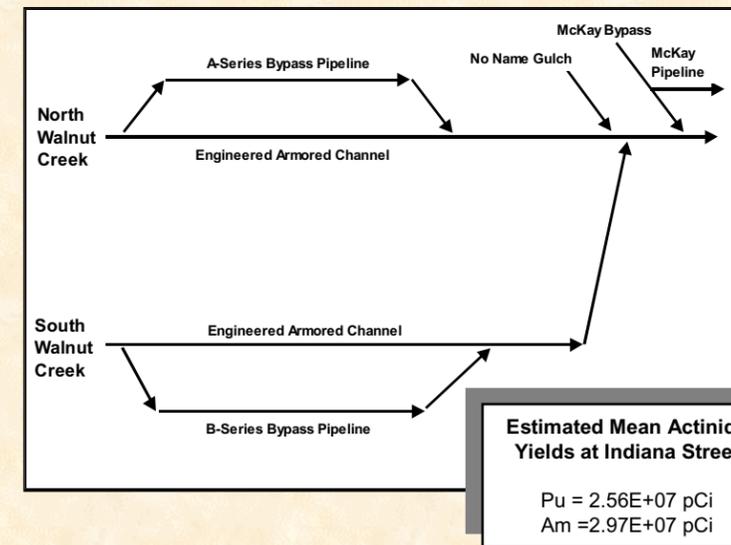
Estimated Mean Actinide Yields at Indiana Street
Pu = 3.92E+07 pCi
Am = 4.54E+07 pCi

Walnut Creek: Only Pond B-5 Remains

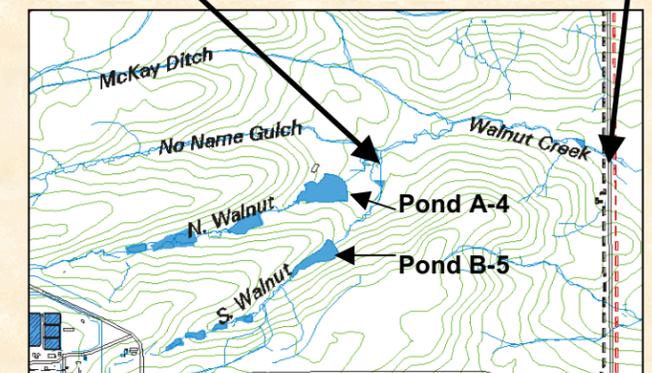


Estimated Mean Actinide Yields at Indiana Street
Pu = 3.47E+07 pCi
Am = 4.28E+07 pCi

Walnut Creek: No Ponds Remain



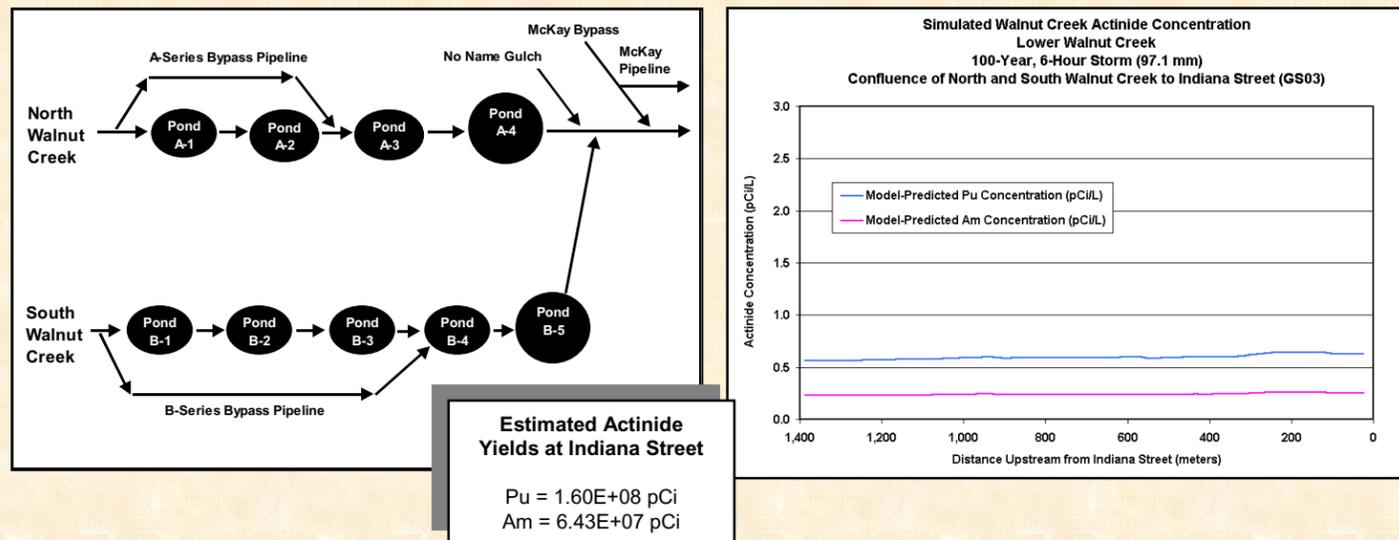
Estimated Mean Actinide Yields at Indiana Street
Pu = 2.56E+07 pCi
Am = 2.97E+07 pCi



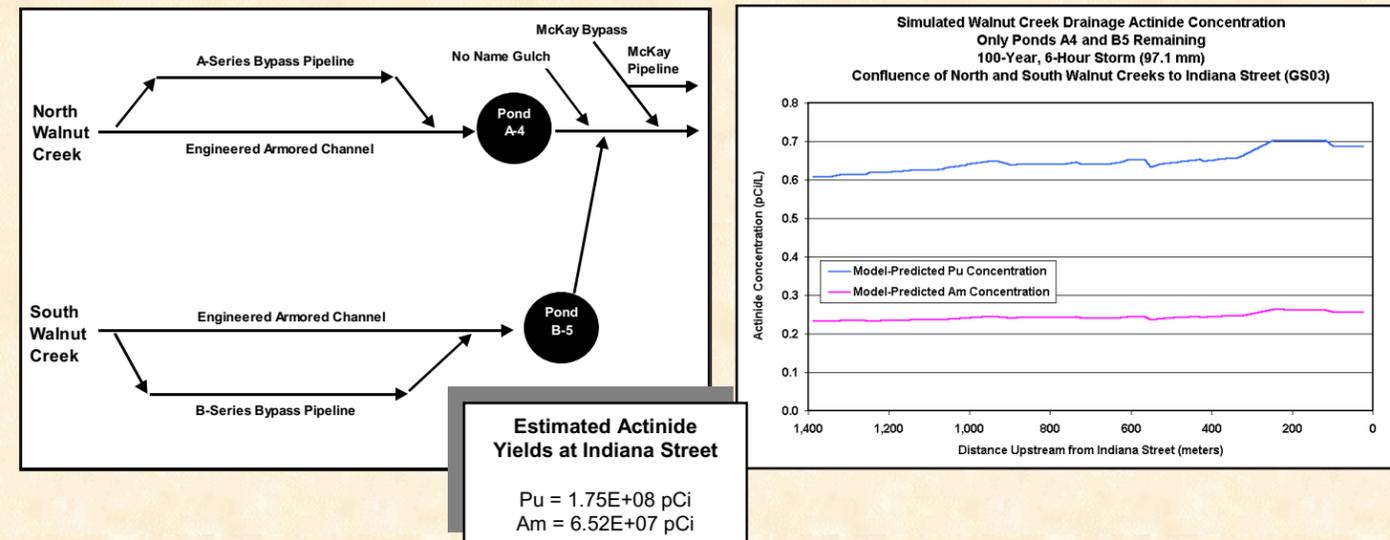
**Lower Walnut Creek
Location Reference**

**Figure 38. Walnut Creek - 4 Pond Configuration Alternatives
Model-predicted Pu and Am
Surface Water Concentrations in
Lower Walnut Creek - 100-Year,
6-Hour Storm (97.1-mm)**

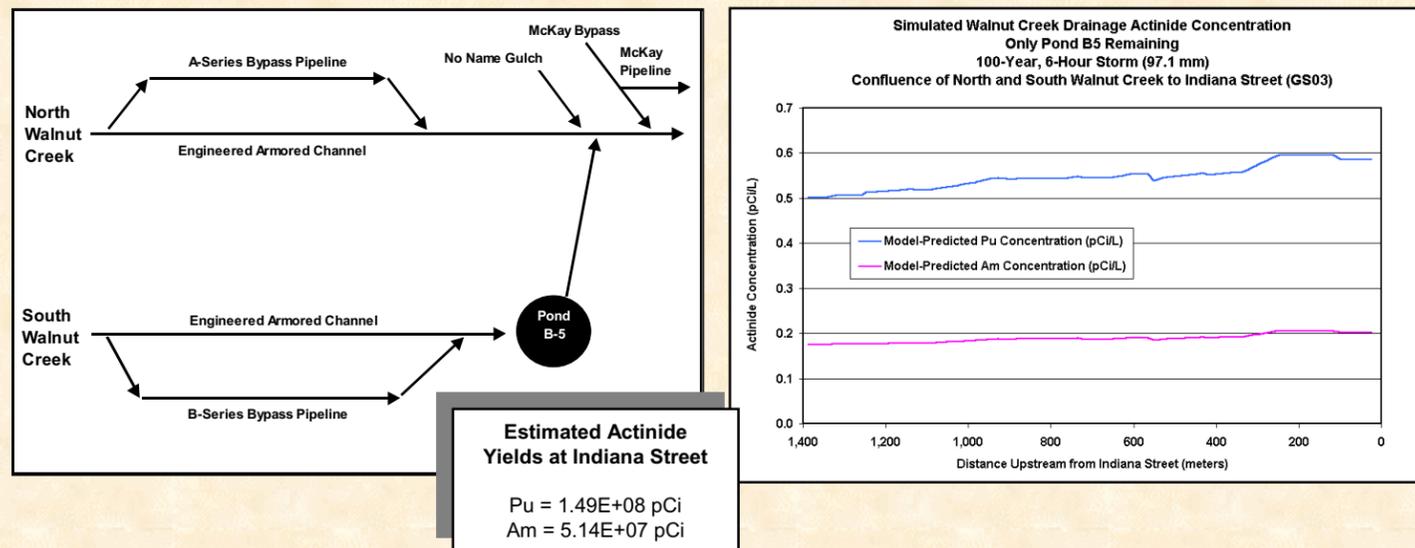
Walnut Creek: Current Pond Configuration



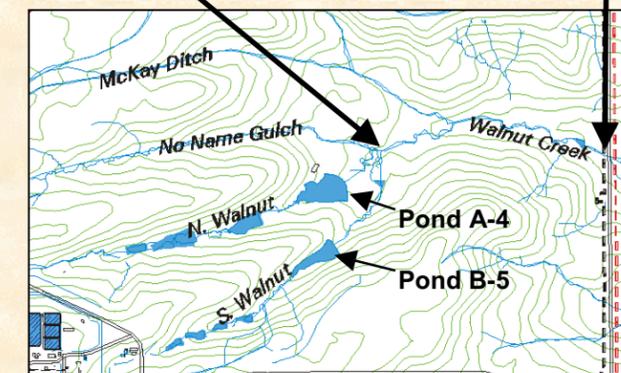
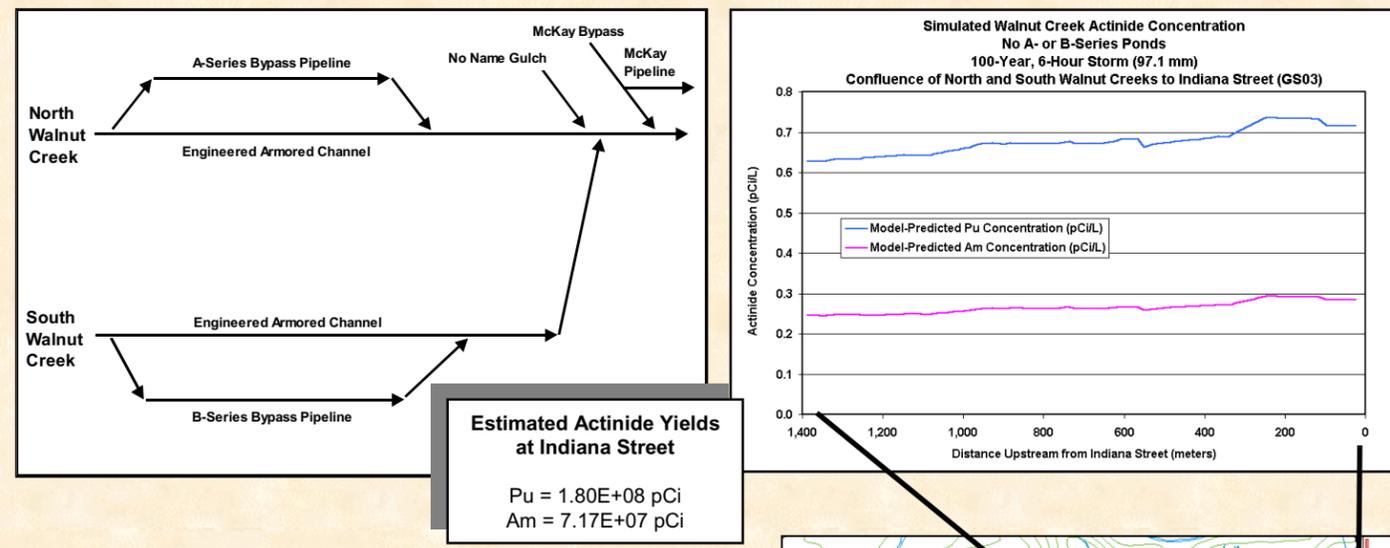
Walnut Creek: Only Pond A-4 and B-5 Remain



Walnut Creek: Only Pond B-5 Remains



Walnut Creek: No Ponds Remain



**Lower Walnut Creek
Location Reference**