



No Further Action Necessary to Address Contamination in the East Branch of the Sebasticook River

The Cleanup Proposal...

After careful study of the Eastland Woolen Mill Superfund Site, EPA is proposing that no further action is necessary to address the contamination in the **sediments** and **floodplain soil** of the East Branch of the Sebasticook River, including the area known as the Old Dump.

EPA has determined that the contamination found in the East Branch of the Sebasticook River surface water, sediments, floodplain soil (including the Old Dump) and **biota** does not pose an unacceptable risk to human health and the environment. The detailed ecological studies concluded that the **biological integrity** of the Operable Unit II (OU II) area has not been significantly degraded by the contamination.

*Definitions for words that appear in bold can be found in the glossary.

What do you think?

You are invited to attend an informational public meeting on June 29th, 2004 to learn about EPA's Proposed Plan to take no further action regarding the East Branch of the Sebasticook River. At the meeting, EPA will respond to your questions and concerns about the No Further Action proposal and how it may affect you. For further information about this meeting, call EPA Community Involvement Coordinator Pam Harting-Barrat (617) 918-1318, or toll-free at 1-888-372-7341 ext. 81318.

EPA is accepting public comment on this cleanup proposal from July 13th 2004 through August 12th 2004. You do not have to be a technical expert to comment. If you have a concern or preference regarding EPA's proposed cleanup plan, EPA wants to hear from you before making a final decision on how to protect your community. To provide formal comments, you may:

Offer oral comments during the comment portion of the formal public hearing on August 10th (see page 9 for more details).

First Meeting

Public Information Meeting to learn more about this proposed plan

June 29th 2004
7:00 p.m.

Corinna School Gymnasium
Stetson Road
Route 222
Corinna, ME

Second Meeting

Formal Comment Session to give citizens the opportunity to enter official comments for public record about this proposed plan

August 10th 2004
at 7:00 p.m.

Corinna School Gymnasium
Stetson Road

Send written comments postmarked no later than August 12th 2004 to:

Edward Hathaway, RPM
U.S. EPA New England
1 Congress Street
Suite 1100 (HBT)
Boston, MA 02114-2023

E-mail comments by August 12th 2004 to: hathaway.ed@epa.gov

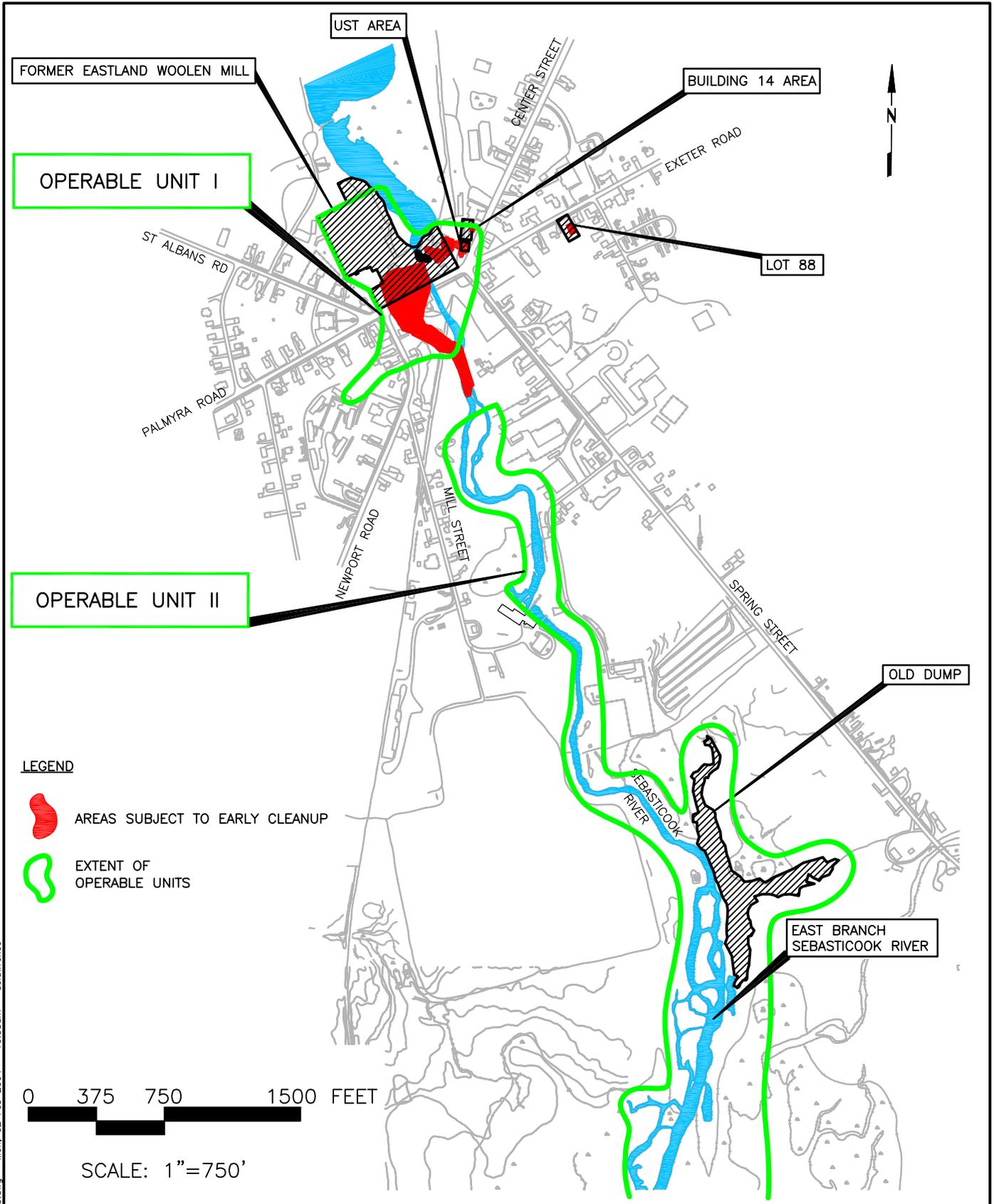


FIGURE 1
SITE PLAN SHOWING OPERABLE
UNIT BOUNDARIES AND
STUDY AREAS

EASTLAND WOOLEN MILL SITE
CORINNA, MAINE

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Site History

- ◆ Eastland Woolen Mill operated as a wool and blended wool textile facility from 1912 to 1996.
- ◆ Liquid wastes from the Mill were discharged to the East Branch of the Sebasticook River until approximately 1969 when the local sewage treatment plant was built.
- ◆ In 1983, contamination of groundwater was discovered and carbon filters were installed on five water supplies.
- ◆ By 1988, ten water supplies were fitted with carbon filters.
- ◆ Eastland Woolen Mill performed investigations to assess the contamination from 1984 - 1995.
- ◆ A water line was installed in 1995 to provide water for those residences and businesses with contaminated wells.
- ◆ Eastland Woolen Mill ceased operations in 1996.
- ◆ Maine DEP removed 54,673 pounds of various hazardous substances from the closed Mill in 1997.
- ◆ EPA began investigations of the Eastland Woolen Mill in December 1998.
- ◆ EPA placed the Eastland Woolen Mill on the National Priorities List (Superfund list) in July 1999.
- ◆ EPA signed the Action Memorandum to initiate early cleanup action in July 1999.
- ◆ EPA signed the Record of Decision for Operable Unit I - groundwater cleanup in September 2002.
- ◆ EPA completed the excavation and treatment of soil as part of early cleanup action in October 2003.

Scope and Role of this Action

The No Further Action proposal presented in this Proposed Plan represents EPA's cleanup approach for the area known as "Operable Unit II", which is the third phase of EPA's overall cleanup strategy for the Eastland Woolen Mill Superfund Site. The three phases of the cleanup strategy are discussed briefly below. (See Figure 1: Site Plan).

First phase of cleanup activity- Non-Time Critical Removal Action (NTCRA), or early cleanup. The first phase of the cleanup activity began in July 1999 with the demolition of the former Eastland Woolen Mill. During the period from 1999 through 2003, EPA completed the excavation and treatment of 100,000 tons of contaminated soil along with the partial restoration of the Site.

Two activities awaiting completion under the NTCRA:

- ◆ Final grading and site restoration. The majority of this work will be completed in 2004.
- ◆ In-situ oxidation of the deep overburden/shallow bedrock contamination. This work will continue into 2005 and possibly, 2006.

Second phase of cleanup activity- Long-Term Site Cleanup (Remedial Action) for Groundwater (Operable Unit I). The second phase of cleanup activity, or Operable Unit I, targets the contaminated groundwater beneath the former Eastland Woolen Mill complex and downtown Corinna. EPA is currently completing the design for the Operable Unit I cleanup.

Third phase of cleanup activity- Sediments/Floodplain Soils within the East Branch of the Sebasticook River and the Old Dump (Operable Unit II). The third phase of cleanup activities, or Operable Unit II, includes all remaining areas of Site contamination not included within the NTCRA or OU I. The areas included within OU II are the **sediment** and **floodplan soil** of the East Branch of the Sebasticook River extending from the end

of the NTCRA excavation to Sebasticook Lake, including the area known as the “Old Dump.” This Proposed Plan describes the investigations, results, and EPA’s proposed cleanup approach for these areas. See Figure 2 for the extent of OU II.

Remedial Investigation Program

A Remedial Investigation (RI) involves the collection of data to determine the nature and extent of contamination at a site. The RI for the Eastland Woolen Mill was performed from 1999 - 2001. The Remedial Investigation Report for OU I and OU II and the Feasibility Study Report for OU I were released in July 2002.

A supplemental RI field investigation program was conducted during 2002 and 2003 to better define the extent of contamination in the OU II areas and to better assess the potential risks to the **ecological receptors** from the contamination. A Supplemental RI Report and Revised Baseline Ecological Risk Assessment Report containing the results of the studies and revised risk evaluation will be released July 12, 2004. The data collected as part of the Supplemental RI did not indicate a need to revised the Human Health Risk Assessment. The July 2002 Human Health Risk Assessment is the final Human Risk Assessment for OU II. A summary of the findings of the combined RI and Supplemental RI are presented below.

East Branch of the Sebasticook River Sediment and Floodplain Soil (including the Old Dump)

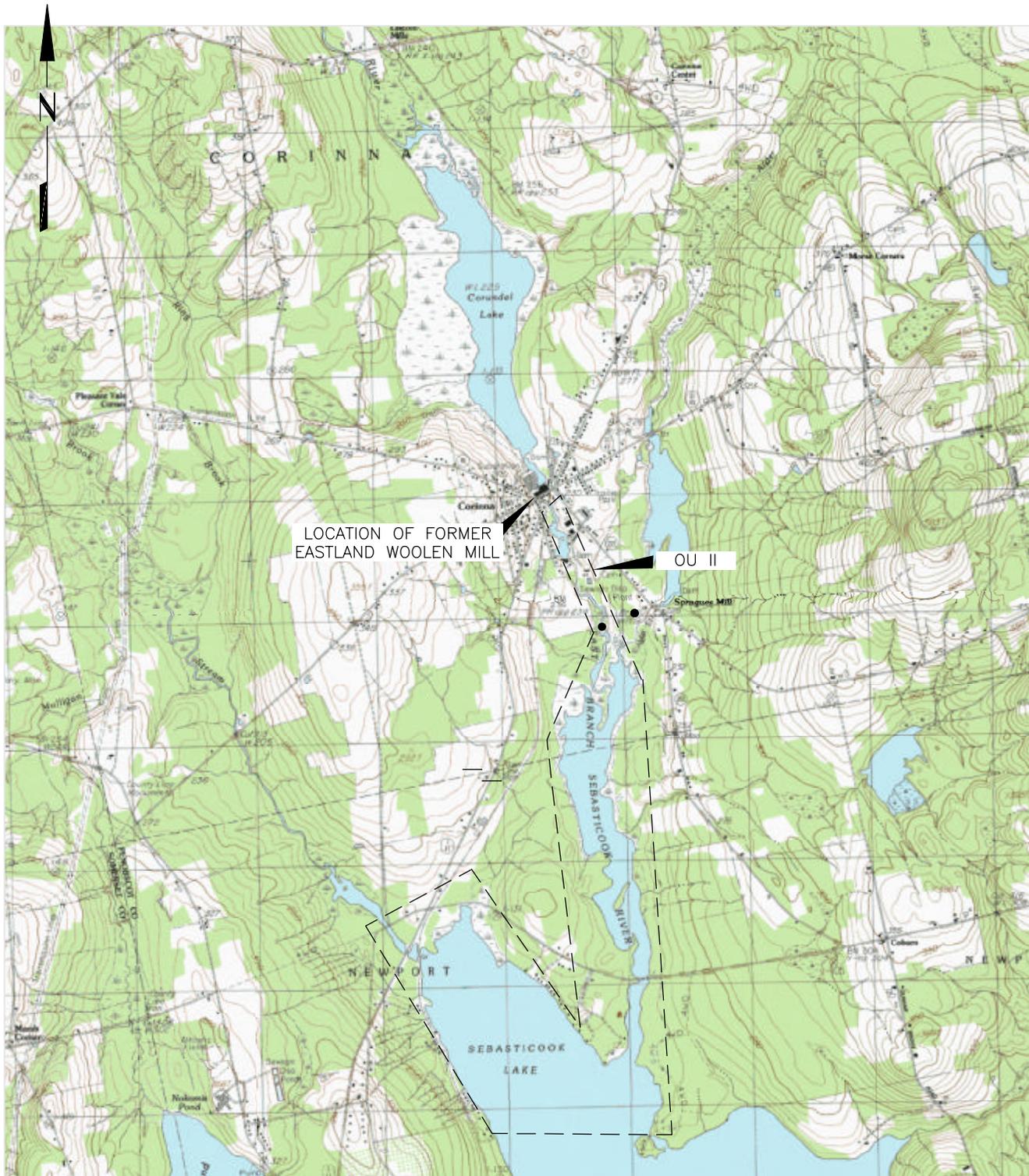
The OU II component of the RI documents the nature and extent of contamination in surface water and sediments of the East Branch of the Sebasticook River and the associated floodplain soil, including the area known as the Old Dump. The investigation study area extended for approximately four miles from downtown Corinna to Sebasticook Lake.

The initial physical survey of the OU II area revealed 14 distinct floodplain areas and seven distinct river areas that were evaluated for contamination as part of the RI field programs. As part of the Baseline Ecological Risk Assessment, areas with similar physical characteristics were combined resulting in the identification of two **floodplain soil exposure areas** and five **sediment exposure areas**. See Figure 3 which shows the floodplain and sediment exposure areas. Only the portion of Sediment Exposure Area E which is contaminated (which is the section about 1 mile north of Sebasticook Lake) is shown on Figure 3. To identify areas of contamination within these floodplain and sediment exposure areas, EPA performed the following studies:

- ◆ Placed 392 vapor diffusion samplers in the river bed to determine areas where contamination may be present;
- ◆ Installed 36 borings into the sediment to delineate the depth of contamination; and
- ◆ Collected 258 sediment and 402 floodplain soil samples to identify the contaminants that are present in the sediment and floodplain soil and to delineate the extent of the contamination.

Using these data, EPA performed studies to obtain a better understanding of the potential impacts of the contamination on the ecological receptors at the Site. The studies included:

- ◆ Placement of very small aquatic organisms in test chambers within the river sediments to evaluate toxicity (in-situ toxicity testing);
- ◆ Exposure of laboratory test organisms to sediment and floodplain soil samples collected from the Site (ex-situ toxicity testing);
- ◆ **Bioaccumulation** studies of earthworms using floodplain soil;
- ◆ Collection and analysis of 18 fish (fillets and whole fish) samples, 9 mussel samples, and 8 crayfish samples to assess contamination levels in these receptors and provide bioaccumulation information;
- ◆ Field survey of plant communities in the floodplain exposure areas;



LOCATION OF FORMER
EASTLAND WOOLEN MILL

OU II

NOTES:

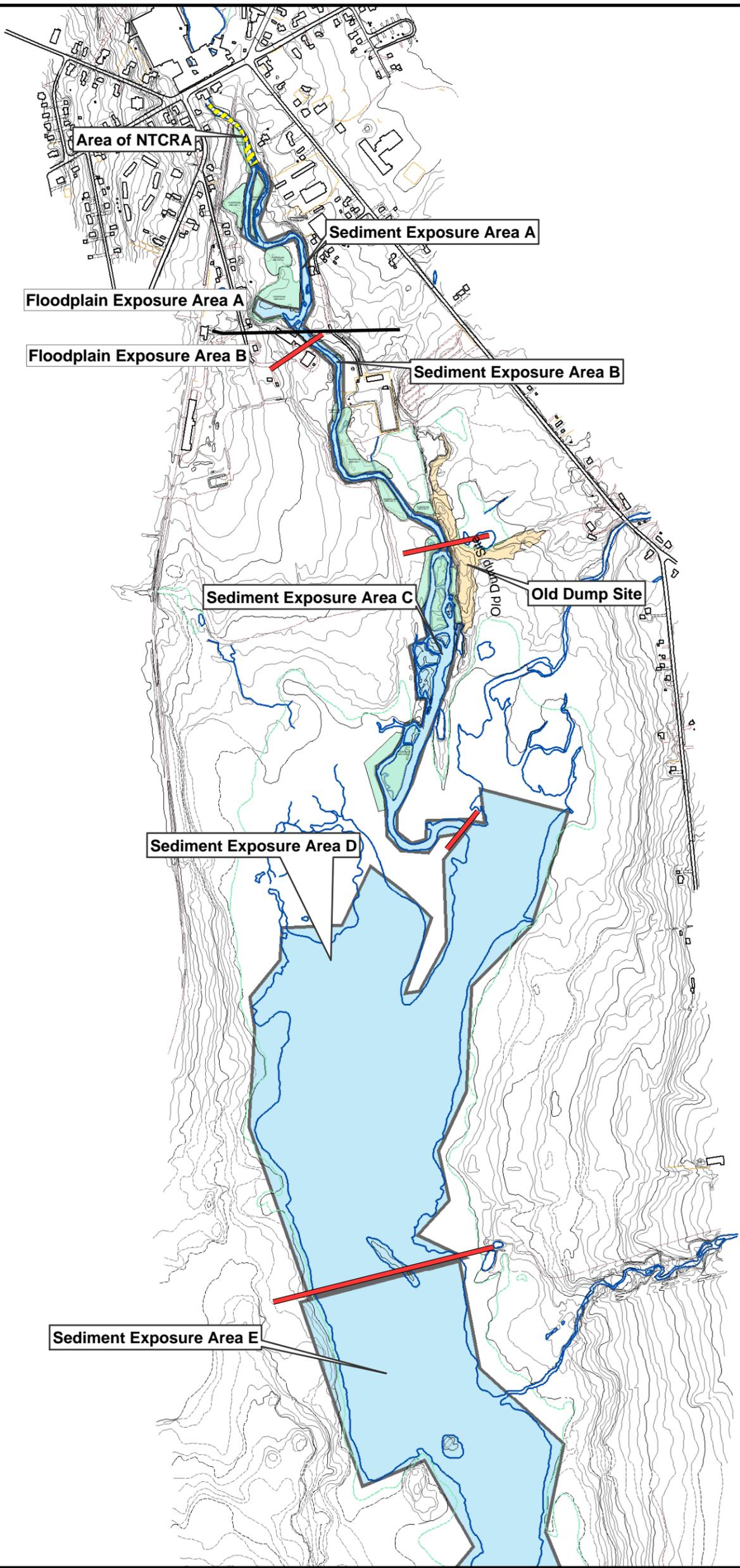
- 1. REFERENCE LOCATION FOR FRESHWATER MUSSEL SAMPLE (LINCOLN MILLS) NOT SHOWN.
- 2. MAP SOURCE: USGS DEXTER, GARLAND, CORINNA, STETSON, NEWPORT, AND PLYMOUTH, ME. 7.5 MINUTE QUADRANGLES.

0 2,000 4,000

Approximate Scale in feet

PREPARED BY: /DATE:	BGF/2-3-04
CHECKED BY: /DATE:	INB/3-12-04

FIGURE 2
OU II LOCATION MAP
EASTLAND WOOLEN MILL SITE
CORINNA, MAINE



Index Map



0 250 500
Feet

Legend

-  Area Remediated as part of NTCRA
-  Sediment Exposure Areas
-  Floodplain Exposure Unit Boundary
-  Sediment Exposure Unit Boundary
-  Floodplains

Figure 3
Sediment and
Floodplain Exposure Areas
Eastland Woolen Mill Site
Corinna, Maine

Prepared by INB | Checked by PSB

MACTEC Engineering and Consulting, Inc.

- ◆ Field survey of earthworm abundance in the floodplain exposure areas;
- ◆ Field survey of the **benthic macroinvertebrate** community in the sediment exposure areas;
- ◆ Field survey of the **macroinvertebrate** community present on submerged aquatic vegetation in the sediment exposure areas; and
- ◆ Qualitative survey of fish abundance as part of the fish tissue collection.

The investigation program findings are summarized below:

- ◆ **Chlorinated benzene compounds**, several metals (cadmium, chromium, copper, lead, and zinc), polycyclic aromatic hydrocarbons (“PAHs” which are combustion by-products), dioxin, and several pesticides (dieldrin, DDT, DDD, DDE, chlordane) have been detected in the sediment of the East Branch of the Sebasticook River and associated floodplain soil at concentrations that required a detailed evaluation of the potential impact of these contaminants on human health and the environment.
- ◆ Pesticides (including DDT, DDE and dieldrin), polychlorinated biphenyls (PCBs), mercury, and dioxin were detected in fish tissue.
- ◆ Chlorinated benzene compounds were detected within the overburden groundwater at the Old Dump and are discharging along the edge of the Old Dump to the East Branch of the Sebasticook River.
- ◆ Dieldrin appears to be related to the activities at the Eastland Woolen Mill. It is also possible that the Eastland Woolen Mill may have contributed some amount of the other pesticides (DDT, DDD, DDE, and gamma chlordane). These pesticides were widely used and were detected in background locations.
- ◆ The PAHs, PCBs, mercury, and dioxin do not appear to be related to the activities at the former Eastland Woolen Mill and may be of **non-point source** origin.

Figures 4 - 7 identify the areas of sediment and floodplain soil where contamination was detected

above concentrations that required further consideration in the RI and risk assessments. Figure 7 does not show the OU II study areas in Sebasticook Lake because the extent of Site related contamination ends about 1 mile north of the Lake. Figure 8 shows the location of the biota samples.

What Does This Mean to You?

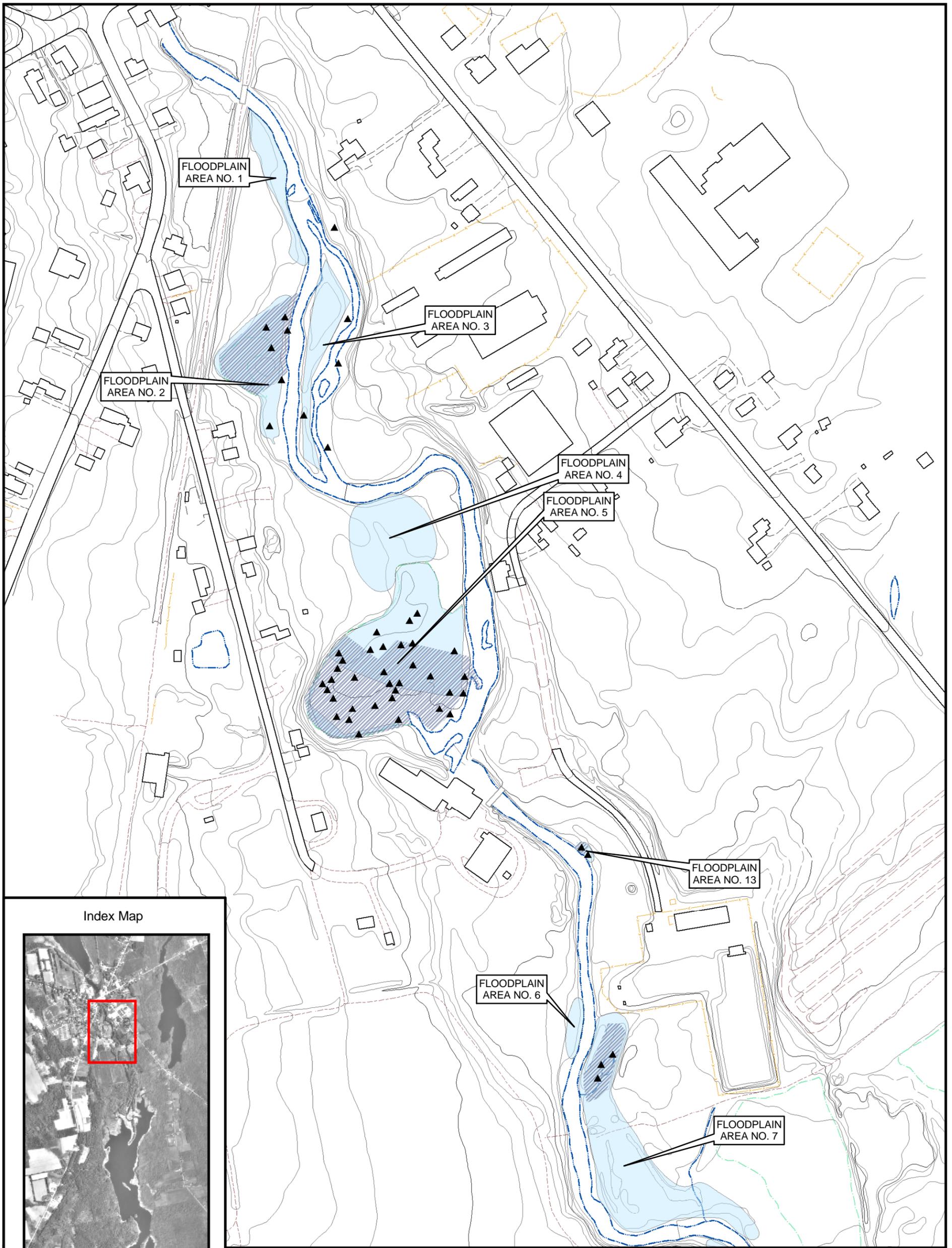
As part of the RI/FS, EPA completed a Baseline Human Health Risk Assessment and a Baseline Ecological Risk Assessment. After completing the supplemental remedial investigation program, EPA completed a Revised Baseline Ecological Risk Assessment.

Baseline Human Health Risk Assessment

The Baseline Human Health Risk Assessment evaluated the potential for health impacts associated with human use of the East Branch of the Sebasticook River sediment and floodplain soil (including the Old Dump). The conclusion of the Baseline Risk Assessment are summarized below:

- ◆ Human contact with the sediments and floodplain soils does not present a health problem.
- ◆ Human health contact with surface water does not pose a health problem.
- ◆ Ingestion of fish by people has a low level of potential health risk as long as Maine’s established fishing advisories are heeded.
- ◆ There is not a human health threat to persons visiting the Old Dump area and coming into contact with the soil.
- ◆ Concentrations of chlorinated benzene compounds in the overburden groundwater of the Old Dump would not be safe for consumption, however, groundwater at the Old Dump is not considered to be a usable source of water.

Table 1 presents the quantitative estimate of potential risk to humans. The risk estimates are developed from a set of conservative assumptions such that the true risk is unlikely to be greater than the risk predicted. The resulting risk estimates are expressed in scientific notation as a probability (e.g., 1×10^{-6} for 1/1,000,000)



Index Map



Legend

- Floodplains
- Floodplains Exceeding PRGs
- Floodplain Samples with Pest/PCB and Inorganics Data

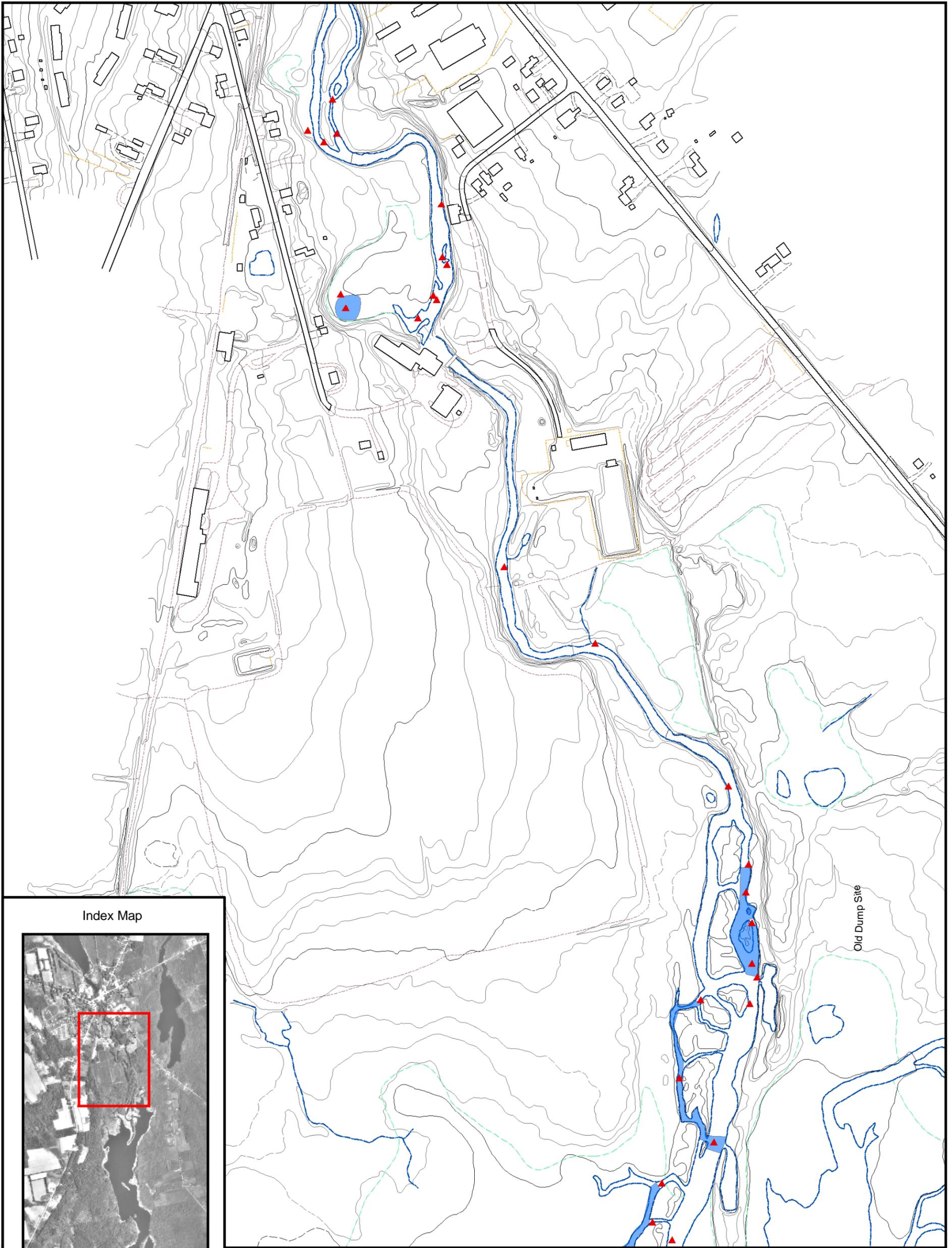


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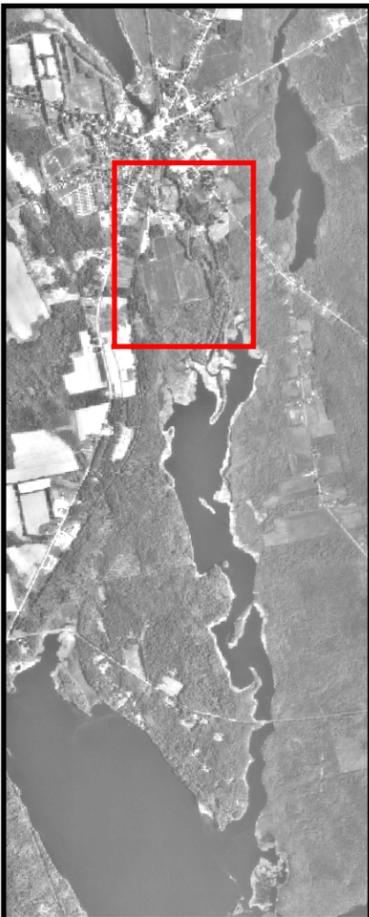
Figure 4
Floodplain Soils Above PRGs
Floodplains Nos. 1 through 7 and 13

Eastland Woolen Mill Site
 Corinna, Maine

MACTEC Engineering and Consulting, Inc.



Index Map



Legend

- ▲ Sediments with Pest/PCB and Inorganic Data
- Sediment Concentrations Above PRGs



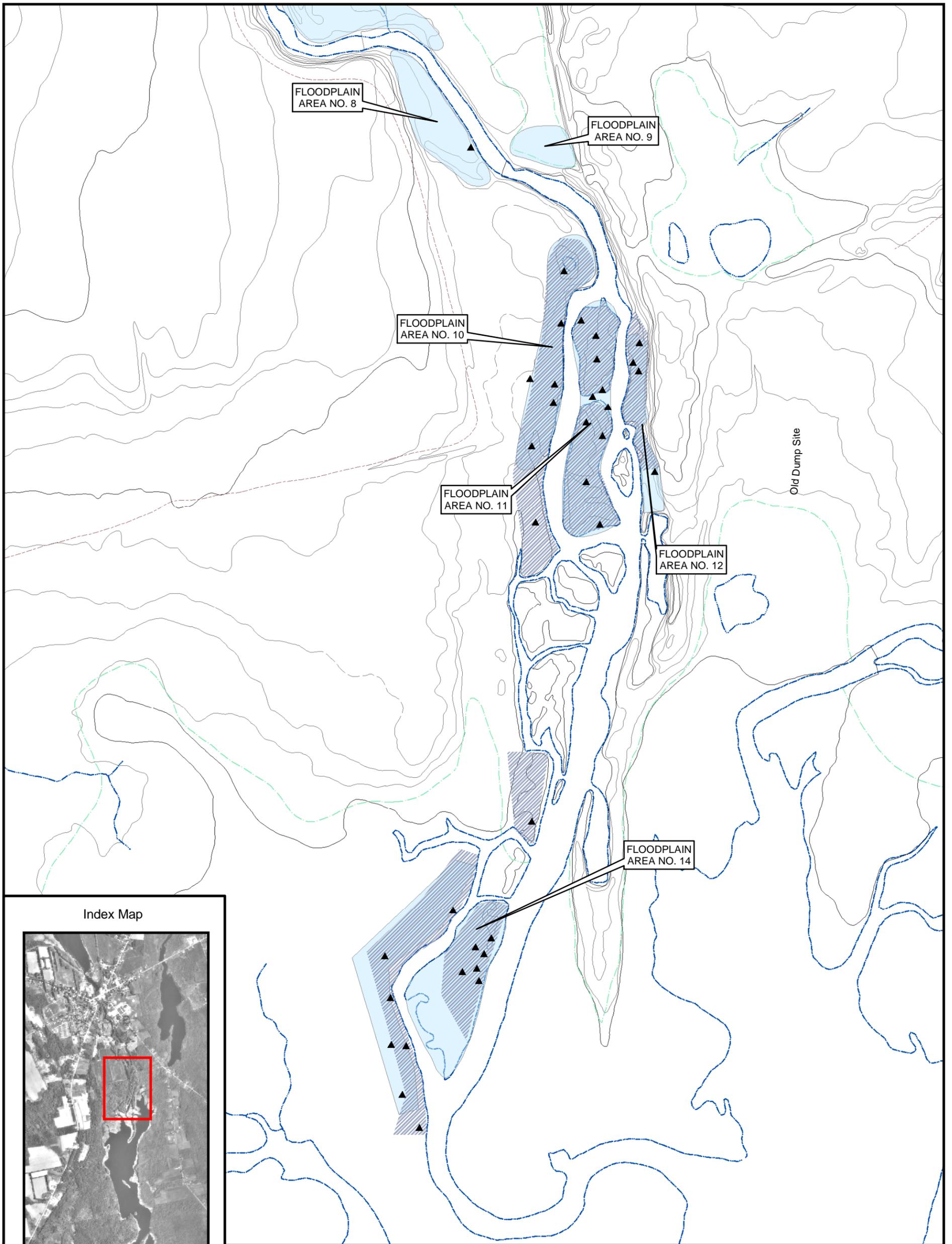
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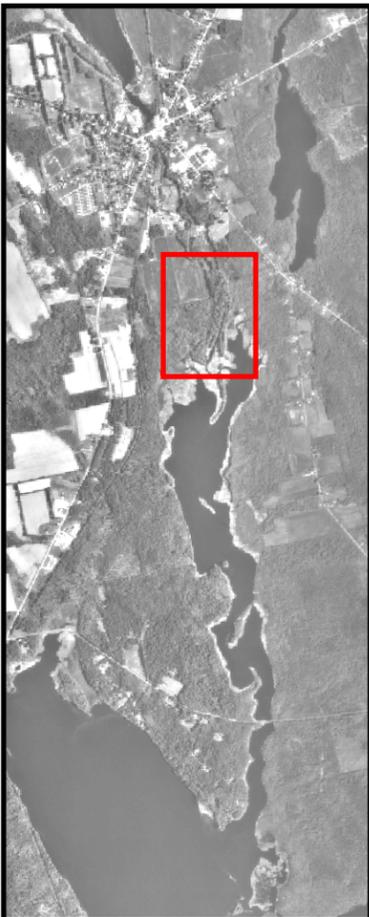
Figure 5
Sediment Contamination Above PRGs
ESUs II through VI

Eastland Woolen Mill Site
Corinna, Maine

MACTEC Engineering and Consulting, Inc.



Index Map



Legend

- Floodplains
- Floodplains Exceeding PRGs
- Floodplain Samples with Pest/PCB and Inorganics Data

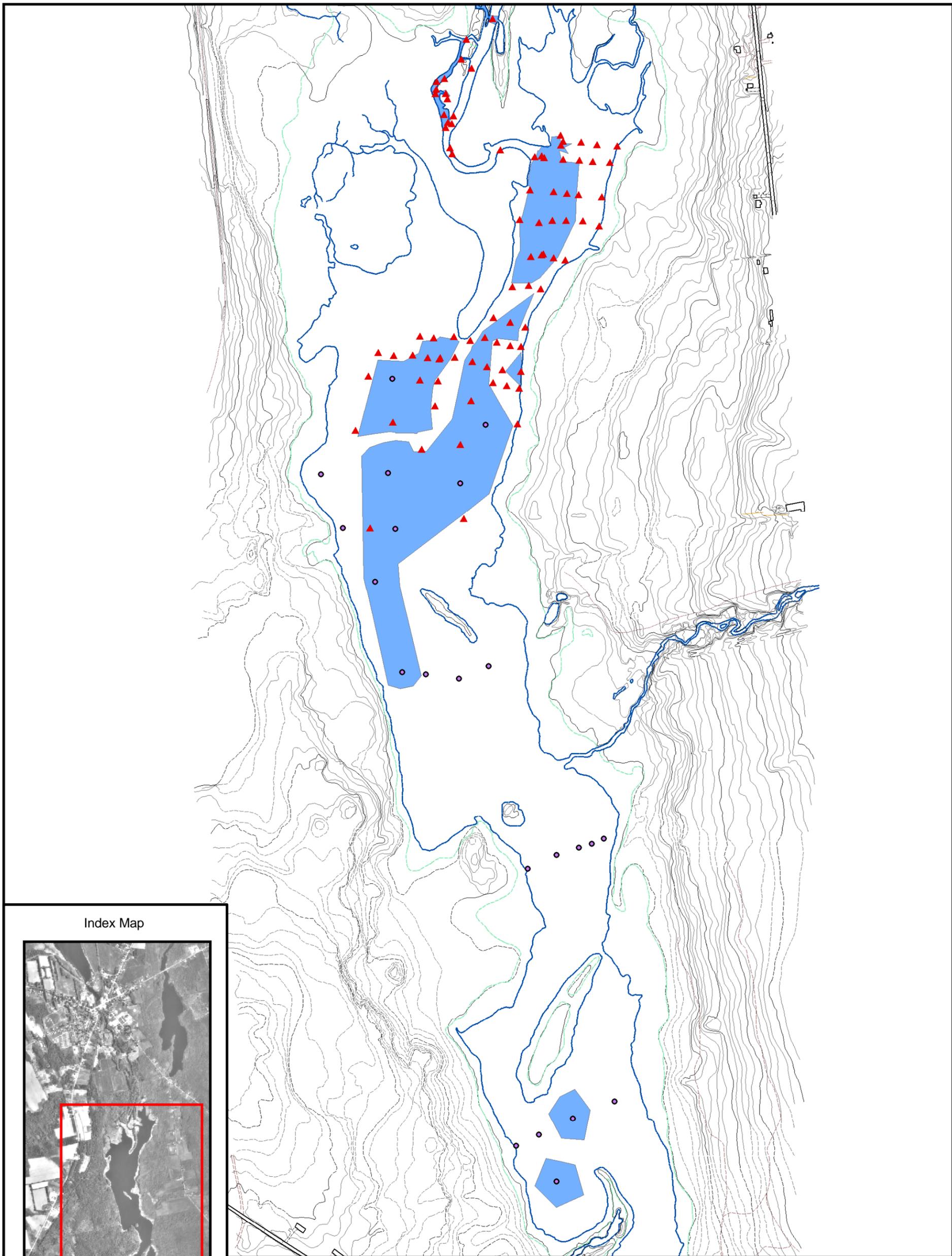


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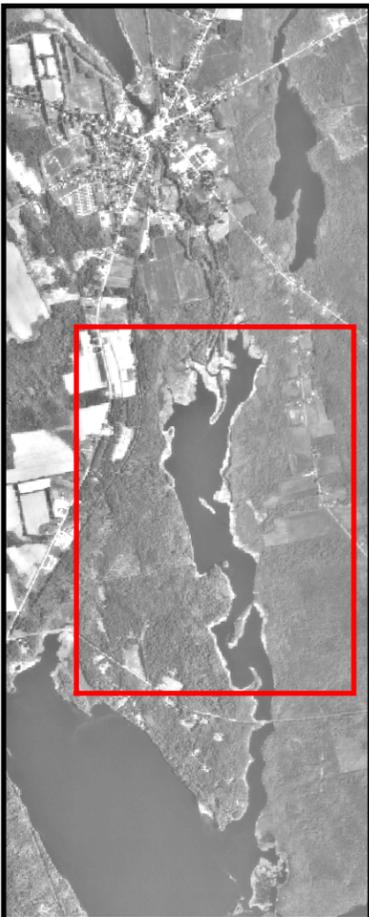
Figure 6
Floodplain Soils Above PRGs
Floodplain Nos. 8 through 12, and 14

Eastland Woolen Mill Site
Corinna, Maine

MACTEC Engineering and Consulting, Inc.



Index Map



Legend

- December 2002 Sediment Sample (pesticides only)
- ▲ Sediments with Pest/PCB and Inorganic Data
- Sediment Concentrations Above PRGs



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Prepared by INB | Checked by PSB

Figure 7
Sediment Contamination Above PRGs
ESUs VII and VIII

Eastland Woolen Mill Site
Corinna, Maine

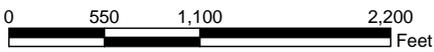
MACTEC Engineering and Consulting, Inc.



Figure 8
Location of Biota Samples



- Legend**
- ▲ Crayfish Sample
 - Benthic Macroinvertebrate Sample
 - Areas containing levels of contaminants that could potentially impact the environment
 - ★ Fish Tissue Sample
 - * Mussel Tissue Sample



Eastland Woolen Mill Site
Corinna, Maine

and indicate (using this example), that an average individual is not likely to have greater than a one in a million chance of developing cancer over 70 years as a result of site-related exposure (as defined) to the compound at the stated concentration. All risks estimated represent an “excess lifetime cancer risk,” or the additional cancer risk on top of that which we all face from other causes such as cigarette smoke or exposure to ultraviolet radiation from the sun. The chance of an individual developing cancer from all other (non-site-related) causes has been estimated to be as high as one in three. EPA’s generally acceptable risk range for site-related exposure is 10^{-4} to 10^{-6} .

**Table 1
Human Health Risk**

	Estimated Cancer Risk	Hazard Index
Risk for contact with or ingestion of Floodplain Soil or Sediment		
Exposure Area 1 (Eastland Woolen Mill to Moosehead Mill)	2×10^{-5}	0.9
Exposure Area 2 (Moosehead Mill to Old Dump)	2×10^{-5}	0.6
Exposure Area 3 (Old Dump to Sebasticook Lake)	2×10^{-5}	0.5
Old Dump	2×10^{-5}	0.2/ 1
Ingestion of Fish Tissue		
Upper East Branch of the Sebasticook River (Moosehead Mill to Corinna)	2×10^{-5}	2
Lower East Branch of the Sebasticook River (Old Dump to Sebasticook Lake)	4×10^{-5}	1

* Soil exposure frequency: 52 days per year for child/adult and 104 days per year for adolescent

* Sediment exposure frequency: 26 days per year for child/adult and 52 days per year for adolescent

* Fish ingestion rate of 25 grams/day for 350 days/year

In assessing the potential for adverse effects other than cancer, a hazard quotient (HQ) is calculated by dividing the daily intake level by the reference dose (RfD) or other suitable benchmark. Reference doses have been developed by EPA, and they represent a level to which an individual may be exposed that is not expected to result in any deleterious effect. RfDs are derived from epidemiological or animal studies and incorporate uncertainty factors to help ensure that adverse health effects will not occur. A $HQ \leq 1$ indicates that a receptor’s dose of a single contaminant is less than the RfD, and that toxic noncarcinogenic effects from that chemical are unlikely. The Hazard Index (HI) is generated by adding the HQs for all chemical(s) of concern that affect the same target organ (e.g., liver) within or across those media to which the same individual may reasonably be exposed. A $HI \leq 1$ indicates that toxic noncarcinogenic effects are unlikely.

EPA generally defines an unacceptable risk to be a cancer risk greater than 10^{-4} or a non-cancer hazard index above 1. As shown in Table 1, the estimated cancer risk for the Operable Unit II area is within the EPA risk range and the non-cancer risk only exceeds 1 based on the ingestion of mercury (which is not considered to be site related).

In addition to EPA’s Baseline Human Health Risk Assessment, the Agency for Toxic Substances and Disease Registry (ATSDR) performed a **Public Health Assessment** (PHA) for the Eastland Woolen Mill. ATSDR did not identify any ongoing exposure which would result in health effects. Residents with contaminated wells have been provided clean water, and highly contaminated soil and sediment in the areas most likely to be most often accessed have been removed. Therefore, ATSDR classifies the former EWM site as a current no apparent public health hazard.

Based upon the results of the RI Report and the Baseline Human Health Risk Assessment, EPA has concluded that there are no unacceptable risks to human health associated with the Site within the OU II area.

Additional Information Regarding Fish Consumption:

EPA fish sampling identified mercury, dieldrin, PCBs, and dioxin as contaminants of concern in the fish. EPA has concluded that mercury detected in fish near the Site is most likely attributable to a State-wide problem of mercury contamination in all Maine inland waters, and is not associated with past contamination at the Eastland Woolen Mill Site. While the dieldrin that was detected in fish tissue is likely to be Site related, there is no evidence to suggest that the low levels of dioxin and PCBs also found in the fish tissue were Site related. EPA recommends that those considering the consumption of fish in the OU II area refer to, and comply with, the Maine Department of Inland Fisheries and Wildlife, *Open Water Fishing Regulations*. For details about the statewide fish consumption advisory please go to: <http://www.maine.gov/dhs/ehu/fish/>. The advisory applies to all warm water fish species in Maine inland waters due to mercury contamination.

Baseline Ecological Risk Assessment

In addition to the evaluation of whether there is a risk to human health from contamination released from the Site, EPA also considers the potential impacts to ecological receptors. EPA's goal in protecting the ecological receptors is to address contamination that threatens the biological integrity of the area. Absent the presence of threatened or endangered species, the cleanup decision is based on the magnitude of the risk from the contamination on the biological community, rather than on the potential risk or impact to a particular individual organism. It is therefore, crucial to focus on the Site-specific data and circumstances when evaluating the need for a cleanup.

EPA identified ten ecological receptors at the Site that should be evaluated for ecological risk. These receptors also serve as surrogates for other possible receptors that may reside in the area. EPA then developed a risk assessment question and risk assessment answer for each receptor group to provide a framework for deciding whether the

contamination is causing an "unacceptable risk" to each of these receptors. Table 2 lists the receptor groups and the associated risk questions.

EPA then performed a "**Weight of Evidence**" evaluation to form an opinion regarding the potential risk to each receptor group. For the Eastland Woolen Mill, the overall risk assessment of the data across the multiple lines of evidence at the Site suggests that the contamination from the Site is not having a significant impact on the biological integrity of the area within Operable Unit II, and therefore is not posing a significant ecological risk. The results of the evaluation by receptor group reveal that:

- ◆ The assessment of risk supported a finding of no unacceptable risk to the following receptors: the **avian herbivores** (mallards); mammalian and avian **omnivores** (heron, raccoons); **mammalian** and avian **carnivores** (fox, owl); avian piscivores (kingfisher, osprey); and fish (**demersal** and **pelagic**).
- ◆ The assessment of risk suggested a potential for low level risk to the population, but well below levels that would be considered an "unacceptable risk" to populations for the following receptors: mammalian **piscivores** (mink); mammalian herbivores (voles); and avian **vermivores** (woodcock). The majority of the risk to the mammalian piscivore (mink) and mammalian herbivore (vole) was from exposure to aluminum, which is not believed to be a Site contaminant.
- ◆ The overall **Weight of Evidence** risk assessment, which relied most heavily on the field studies, showed no unacceptable impact to the plant community, **terrestrial invertebrate community**, or **aquatic macroinvertebrate community**. The risk assessment for these receptors was more complex because several of the lines of evidence were in conflict. The laboratory toxicity tests of sediment and floodplain soil indicated a risk and a strong likelihood for adverse impacts to these

Table 2 - Ecological Receptor Summary

Receptor Group	Risk Question	Risk Assessment Answer
Aquatic Plant Community	Are levels of site contaminants in surface water sufficient to cause biologically significant structural alterations or impair the functions of aquatic plant communities?	No
Floodplain Plant Community	Are levels of site contaminants in surface soils sufficient to cause biologically significant structural alterations or impair the functions of floodplain plant communities?	No
Aquatic Macroinvertebrate Community	Are levels of site contaminants in sediment sufficient to cause biologically significant structural alterations or impair the functioning of aquatic macroinvertebrate communities?	No
Terrestrial Macroinvertebrate Community	Are levels of site contaminants in soil sufficient to cause biologically significant structural alterations or impair the functioning of terrestrial macroinvertebrate communities?	No
Fish Populations	Are levels of site contaminants in surface water or fish tissue sufficient to cause biologically significant survival, growth, or reproductive impairment in demersal or pelagic fish populations?	No
Herbivorous Wildlife Populations (mallards, voles)	Are levels of site contaminants in surface water, sediment, surface soil, and diet sufficient to cause biologically significant survival, growth, or reproductive impairment in herbivorous wildlife populations?	No
Omnivorous Wildlife Populations (heron, raccoon)	Are levels of site contaminants in surface water, sediment, surface soil, and diet sufficient to cause biologically significant survival, growth, or reproductive impairment in omnivorous wildlife populations?	No
Piscivorous Wildlife Populations (osprey, kingfisher, mink)	Are levels of site contaminants in surface water, sediment, surface soil, and diet sufficient to cause biologically significant survival, growth, or reproductive impairment in piscivorous wildlife populations?	No
Vermivorous Wildlife Populations (woodcock, shrew)	Are levels of site contaminants in surface water, sediment, surface soil, and diet sufficient to cause biologically significant survival, growth, or reproductive impairment in vermivorous wildlife populations?	No for woodcock Yes for Shrew
Carnivorous Wildlife Populations (owl, fox)	Are levels of site contaminants in surface water, sediment, surface soil, and diet sufficient to cause biologically significant survival, growth, or reproductive impairment in carnivorous wildlife populations?	No

communities. However, these lab results were not substantiated in a 2-year field study specifically designed to evaluate whether impacts were occurring in the field. The plant community in areas of contamination were not found to be different from areas that were not contaminated. The number of earthworms were not found to be different at contaminated versus non-contaminated areas. Likewise, the benthic aquatic macroinvertebrate community was not found to be different and was of similar quality in contaminated versus uncontaminated areas. The annual drawdown of Sebasticook Lake, which drains water from the lower section of the river, appears to have the most significant impact on the aquatic macroinvertebrate community.

- ◆ The assessment of risk supported a finding that some risk is possible to the mammalian vermivore (shrew). The mammalian vermivore was the only receptor whose line of evidence analysis revealed a potential for population impacts as evidenced by the “yes” response to the risk question posed on Table 2. Although aluminum (not a Site contaminant) was a significant contributing factor to the potential impact to the shrew, dieldrin was responsible for the majority of the potential impact. To decide whether an “unacceptable risk” was present for this receptor, EPA 1995 Superfund guidance suggests that the evaluation consider:
 - ◆ magnitude of the effect and the level of biological organization affected
 - ◆ likelihood that an effect will occur or continue to occur
 - ◆ ecological relationship of site to surrounding habitats
 - ◆ sensitivity of the site-affected habitat
 - ◆ recovery potential from an effect, and chemical persistence
 - ◆ short and long-term ecological effect of the remedy
- ◆ The mammalian vermivore (shrew) is expected to have a high potential for recovery due to its high reproductive capacity, and there is a good chance that the potential risks are over-estimated given the spacial variability of the

contaminants. In addition, the toxicity reference values used to estimate the risk were considered to be very conservative. The uncertainty analysis for this receptor indicated that there was a strong likelihood that the risk is substantially overestimated. As a result, while the answer to the risk question in Table 2 was “yes”, the overall conclusion was that the magnitude of the impacts to this receptor are not considered to be an “unacceptable” risk.

In summary, while there is contamination from the Eastland Woolen Mill present in the floodplain soil and sediments of the OU II areas, the ecological risk assessment concluded that impact of this contamination is not causing a loss of ecological function or biological integrity. Additionally, some adverse impacts are potentially attributable to other factors, such as the annual drawdown of Sebasticook Lake.

Based upon the results of the RI Report, Supplemental RI Report and the Revised Baseline Ecological Risk Assessment, EPA has concluded that there are no unacceptable risks to the environment associated with the Site within the OU II area.

Why Does EPA Recommend the Cleanup Action described in this Proposed Plan?

EPA believes the scientific information collected as part of the RI supports a finding of **No Unacceptable Risk to Human Health and the Environment**. As a result of this finding, EPA has not developed a Feasibility Study for OU II to identify and evaluate potential cleanup alternatives and no further action will be taken with respect to the OU II area.

This decision does not preclude the State of Maine from initiating action under applicable state regulations if violations of state law are occurring within the OU II area.

How You Can Comment On EPA's No Further Action Proposal?

During the 30-day public comment period, from July 13th to August 12th 2004, EPA will accept formal written comments and hold a public hearing on August 10th. EPA uses this public input to improve the cleanup proposal. Your formal input and ideas will become part of the official public record. The transcript of comments and EPA's written responses will be issued in a document called a **Responsiveness Summary** when EPA releases the final cleanup decision. Once complete, the Responsiveness Summary will be available at the Stewart Public Library for review.

There are three different ways in which individuals can express their comments on this Proposed Plan

- ◆ Comments can be sent to the EPA RPM by email at: hathaway.ed@epa.gov.
- ◆ Comments can be spoken into the official public record during the public hearing that will occur during the comment period.
- ◆ Comments can be submitted in writing to EPA.

Edward Hathaway, RPM
U.S. EPA New England
1 Congress Street
Suite 1100 (HBT)
Boston, MA 02114-2023

EPA encourages anyone with a concern or who favors the No Further Action proposal to express their opinion during the comment period. All comments are welcome. Any of the three mechanisms above are acceptable for providing comments and all of the comments are given equal weight.

Two types of public meetings will occur with respect to the Proposed Plan. The first will be an informational meeting to explain the No Further Action proposal and answer any questions that may arise. Comments that are made during this meeting will not be part of the "official record." This meeting will focus on a discussion of the

Proposed Plan and RI and is considered informational only. This meeting is scheduled for June 29th, 2004.

The second type of meeting, a public hearing, will occur during the official comment period. At this meeting, EPA will provide a brief summary of the No Further Action proposal, and then the floor will be open for spoken comments. A stenographer will be present to record all of the comments offered during this comment session. Comments made must be limited in duration in order to allow all individuals present to have an opportunity to speak their comments into the record. EPA does not respond to any of the comments made at the meeting other than to indicate the time limits or request clarification. At the close of the formal comment session, if time permits, EPA will be available to answer questions. This meeting is scheduled for August 10th, 2004.

The comment period will last for 30 days. Once the comment period is complete, EPA will assemble and evaluate all of the submitted comments. Appropriate revisions to the Proposed Plan will be made based on these comments. EPA will then sign the Record of Decision describing the chosen cleanup plan. The ROD and a summary of responses to public comments will be made available to the public at the Stewart Public Library and through EPA Records Center in Boston.

For More Information about the Cleanup:

All of the technical and public information publications prepared to date for the site are available for public review at the following locations:

EPA Records Center
1 Congress Street, Suite 1100
Boston, MA 02114-2023
(617) 918-1453

Hours: 10:00 a.m.-noon, 2:00 p.m.-5:00 p.m.

Stewart Public Library
8 Levi Stewart Drive
Corinna, Maine 04928

A copy of all of the major reports are also available at the Maine DEP offices in Augusta, Maine. Call (207) 287-7843 if you want to access the files at the Bureau of Remediation and Waste Management of the ME DEP.

Next Steps:

By the end of September 2004, EPA expects to have reviewed all comments and signed the Record of Decision (ROD) describing the chosen cleanup plan. The ROD and a summary of responses to public comments will then be made available to the public at the Stewart Public Library and through EPA Records Center in Boston. EPA will announce the decision to the community through the local news media and a general mailing.

If EPA selects the No Further Action approach that is recommended in this Proposed Plan, then any further monitoring or investigation of the OU II area would be the responsibility of the State of Maine or some other stakeholder. EPA will continue to be involved in the completion of the cleanup action in downtown Corinna (OU I and Early Cleanup Action).

Glossary

Aquatic Macroinvertebrate Community:

Refers to the bottom dwelling (benthic) and water column (pelagic) macroinvertebrates. The benthic macroinvertebrates includes crayfish, mussels, and the insects, snails, worms, and other fauna that are often a substantial component of the food chain. Benthic macroinvertebrates may also live on submerged aquatic vegetation. Pelagic macroinvertebrates include zooplankton living in the water column and other macroinvertebrates living on submerged aquatic vegetation.

Avian: This term in the Baseline Ecological Risk Assessment applies to the bird receptors. The avian receptors were further separated into vermivore, herbivore, omnivore, and piscivore categories.

Bioaccumulants: Substances that increase in concentration in living organisms as they take in contaminated air, water, or food because the

substances are very slowly metabolized or excreted. The substances are often accumulate in the body of living organisms.

Biological Integrity: The ability to support and maintain balanced, integrated, functionality in the natural habitat of a given region.

Biota: The animal and plant life of a given region. Some of these plants and animals might be sources of food, clothing, or medicines for people or ecological receptors.

Chlorinated Benzene Compounds: Compounds with chlorine molecules attached to a benzene ring. Chlorobenzene, 1,2 dichlorobenzene, 1,3 dichlorobenzene, 1,4 dichlorobenzene, 1,2,3 trichlorobenzene, and 1,2,4 trichlorobenzene were components of the “dye-aid” that was used to swell the wool fibers to accept the dye.

Demersal: Fish living on or near the bottom and feeding on benthic organisms.

Ecological Receptor: Ecological entity exposed to a stressor. A receptor for the risk assessment was either a particular species (owl, fox, mink, etc.) or a community of species (benthic invertebrates, terrestrial invertebrates) which were evaluated in the risk assessment. The selected species chosen may also represent other possible ecological receptors that exist in the area since a species by species analysis would not be practical.

Floodplain: The flat or nearly flat land along a river or stream or in a tidal area that is covered by water during a flood. Floodplain soils may become contaminated when material that was carried with the water and sediment is deposited during a flood event.

Floodplain Soil Exposure Areas: Distinct areas of the floodplain that were identified for characterization as a single area in the Baseline Ecological Risk Assessment. See Figure 3 for these areas.

Hervivore: Animal whose diet is primarily of vegetation. Herbivorous mammals consume predominantly green succulent vegetation, seeds, roots, bark, and fungi. Their diet may include some insects.

Macroinvertebrate: Macroinvertebrates are small, but visible with the naked eye, animals without backbones (insects, worms, larvae, etc.). Water bodies have communities of aquatic macroinvertebrates. The species composition, species diversity and abundance of the macroinvertebrates in a given water body can provide valuable information on the relative health and water quality of a waterway.

Benthic Macroinvertebrates:

Macroinvertebrates that live on or near the bottom or substrate of a stream. They are considered good biological indicators as to the "health" of a stream due to the sensitivity or tolerance to withstand degraded water quality.

Non-point source: Pollution (contaminants, sediment, sewage) whose source is not well defined. Run-off from roads and agricultural fields are commonly considered non-point source.

Omnivore: Animal whose diet is non-specific and may consume meat (including fish), insects, or vegetation.

Piscivore: Animal whose diet is primarily of fish.

Pelagic: Refers to aquatic organisms (such as fish) living in the open water.

Public Health Assessment (PHA): An ATSDR document that examines hazardous substances, health outcomes, and community concerns at a hazardous waste site to determine whether people could be harmed from coming into contact with those substances. The PHA also lists actions that need to be taken to protect public health. The PHA for the Eastland Woolen Mill can be viewed at the website:

http://www.atsdr.cdc.gov/HAC/PHA/region_1.html

Sediments: Soil, sand, and minerals that are deposited in the bottom of rivers, lakes, and the oceans. These may be washed from land into water, usually after rain or may be the soil, sand, or minerals present in the natural river, lake, or ocean bottom

Sediment Exposure Areas: Distinct areas of the river bottom/sediment that were identified for characterization as a single area in the Baseline Ecological Risk Assessment. See Figure 3 for these areas.

Terrestrial Macroinvertebrate Community: This refers to the various earthworms, spiders, insects found in the floodplain soil.

Vermivore: Animals whose diet is primarily earthworms.

Weight of Evidence: A process of evaluating the multiple lines of evidence and establishing which information should be more heavily considered (or "weighed") based upon a scientific scrutiny of the relevance, quality, and limitations associated with that information. For example: the field surveys of the benthic macroinvertebrate community were considered to carry more weight than the ex-situ toxicity tests and comparison with literature values. As a result, the information from the field studies were the primary basis for EPA's risk conclusion for the benthic macroinvertebrate community.