GE
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USA

July 25, 2007

Ms. Susan Svirsky
U.S. Environmental Protection Agency
c/o Weston Solutions, Inc.
10 Lyman Street
Pittsfield, MA 01201

**Re: GE-Pittsfield/Housatonic River Site
Rest of River (GECD850)
Dispute Resolution on Condition No. 4 in EPA's "Conditional Approval" Letter for GE's Corrective Measures Study Proposal Supplement**

Dear Ms. Svirsky:

Pursuant to Special Condition II.N.I of the Reissued RCRA Corrective Action Permit (the Permit) issued by the U.S. Environmental Protection Agency (EPA) to the General Electric Company (GE) in 2000, GE hereby notifies EPA of GE's objections to Condition No. 4 of EPA's July 11, 2007 letter providing "conditional approval" of GE's May 2007 *Corrective Measures Study Proposal Supplement* for the "Rest of River" portion of the Housatonic River.

By this notice, GE is invoking dispute resolution under Special Condition II.N.1 of the Permit with respect to certain directives set forth in Condition No. 4 of EPA's letter relating to the methodology for developing and applying target floodplain soil concentrations associated with the Interim Media Protection Goals for mink. Those specific directives, as well as GE's objections to them, the bases for GE's position, and the positions that GE believes should be adopted, are set forth in the attached Statement of Position. However, as also noted in that Statement, GE expressly reserves all its rights to contest these or any of the other conditions and directives in EPA's July 11, 2007 letter – including GE's right, pursuant to Special Condition II.N.5 of the Permit, to raise any of its objections in a challenge to EPA's modification of the Permit to select corrective measures for the Rest of River, as well as any other rights that GE has under the Permit, the Consent Decree, or applicable law to raise such objections in the future.

As you know, the first stage of dispute resolution under the Permit involves discussions between the parties to attempt to resolve the disputes. GE looks forward to having such discussions with EPA during the next two weeks in an effort to reach a mutually agreeable resolution of the disputed issues.

Very truly yours,

Andrew T. Silfer, P.E.
GE Project Coordinator

Attachment

cc: Dean Tagliaferro, EPA
Timothy Conway, EPA
Holly Inglis, EPA
Rose Howell, EPA (without attachment)
Susan Steenstrup, MDEP
Anna Symington, MDEP
Jane Rothchild, MDEP
Thomas Angus, MDEP
Dale Young, MA EOEA
Susan Peterson, CDEP
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Kevin Mooney, GE
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Samuel Gutter, Sidley Austin

GENERAL ELECTRIC'S STATEMENT OF POSITION ON OBJECTIONS TO CONDITION NO. 4 IN EPA'S CONDITIONAL APPROVAL LETTER FOR GE'S CORRECTIVE MEASURES STUDY PROPOSAL SUPPLEMENT

July 25, 2007

INTRODUCTION

On February 27, 2007, the General Electric Company (GE) submitted to the U.S. Environmental Protection Agency (EPA) a Corrective Measures Study Proposal (CMS Proposal) for the "Rest of River" area of the Housatonic River, pursuant to Special Condition II.E of the Reissued Resource Conservation and Recovery Act (RCRA) Corrective Action Permit that was issued by EPA to GE on July 18, 2000 (the Permit) as part of the comprehensive settlement embodied in the Consent Decree (CD) for the GE Pittsfield/Housatonic River Site. On April 13, 2007, EPA sent GE a letter stating that EPA was providing "conditional approval" of the CMS Proposal, but also directing GE to take specified actions and adopt certain positions in the CMS and to develop and submit, within 30 days, a supplement to the CMS Proposal (the Supplement) containing specified items for separate review and approval by EPA.

On May 11, 2007, GE submitted the Supplement to the CMS Proposal. On July 11, 2007, EPA issued a letter "conditionally approving" the Supplement. Again, that letter included directives to GE to make certain changes in its evaluation of remedial alternatives in the CMS.

Pursuant to Special Condition II.N.1 of the Permit, GE is invoking dispute resolution on several of the requirements (discussed below) set forth in Condition No. 4 of EPA's July 11, 2007 letter relating to the methodology for developing and applying target floodplain soil concentrations associated with the Interim Media Protection Goals (IMPGs) for mink. For the reasons set forth below, those requirements are contrary to the proper focus of ecologically based remediation, as well as contrary to available information on the foraging characteristics of mink, and will result in a substantial overestimate of average mink exposure. As such, these requirements are arbitrary and capricious and must be reconsidered by EPA.

At this time, GE is invoking dispute resolution only as to the specific directives identified in this Statement of Position. GE expressly reserves all of its arguments and all its rights to contest these or any of the other conditions and directives in EPA's July 11, 2007 letter – including its right, pursuant to Special Condition II.N.5 of the Permit, to raise any of its objections in a challenge to EPA's modification of the Permit to select corrective measures for the Rest of River, as well as any other rights that GE has under the Permit, the CD, or applicable law to raise such objections in the future.

GE POSITION

1. Background

One of the criteria specified in the Permit for evaluating potential remedial alternatives in the CMS is whether the alternatives would attain the IMPGs approved by EPA. The IMPGs consist of preliminary concentration-based numerical goals for various media both for human health protection and for protection of ecological receptors, taking into account EPA's Human Health and Ecological Risk Assessments, respectively. They were set forth in a revised IMPG Proposal submitted by GE in March 2006 and approved by EPA in April 2006.[1] For purposes of the CMS, the relevant IMPGs are those that apply to concentrations of polychlorinated biphenyls (PCBs) in the various media.

In some cases, the IMPGs set forth in the revised IMPG Proposal cannot be directly applied in the CMS, because they apply to media that are not subject to evaluation in the CMS. These include the IMPGs for piscivorous mammals, which were based on an assessment of potential risks to mink, as described in EPA's Ecological Risk Assessment (ERA), and consist of a range of 0.984 to 2.43 mg/kg for PCBs. These IMPGs apply to PCB concentrations in the prey items of these mammals (including both aquatic and terrestrial prey items). In such cases, the IMPGs need to be converted to target PCB concentrations in media subject to evaluation in the CMS – e.g., floodplain soil and/or sediments – for purposes of application in the CMS.

[1] This revised IMPG Proposal was developed by GE in response to a letter issued by EPA in December 2005 disapproving a prior IMPG Proposal submitted by GE and directing GE to make a number of revisions to the proposed IMPGs. GE disagreed with a number of EPA's directives for revising the IMPG Proposal and it preserved its position on those issues. Nevertheless, as required by the Permit, GE submitted a revised IMPG Proposal implementing EPA's directives.

In the Supplement, in response to an EPA directive in its April 13, 2007 conditional approval letter, GE described its proposed methodology for determining such target levels for mink consistent with the IMPGs. GE explained that since the IMPGs apply to PCB concentrations in mink prey, which consist of both aquatic organisms (in which PCB concentrations derive from sediments) and terrestrial organisms (in which PCB concentrations derive from floodplain soil), it is not possible to derive a target level corresponding to the IMPGs in one medium without knowing the value in the other. Accordingly, GE selected a range of target sediment PCB concentrations that fall within the range of other sediment IMPGs – i.e., 1, 3, 5, and 10 mg/kg – and then calculated target floodplain soil concentrations associated with achieving the high and low ends of the dietary IMPG range in mink prey for each of the selected target sediment PCB concentrations.

These calculations were based primarily on data obtained from the Primary Study Area (PSA), which extends from the East and West Branches of the River to Woods Pond Dam; and they used a variety of inputs to calculate PCB concentrations in the different types of prey that make up the mink diet (i.e., aquatic invertebrates, fish, amphibians, birds, and mammals). These inputs included biota-sediment accumulation factors (BSAFs) for aquatic prey items and bioaccumulation factors (BAFs) for terrestrial prey items – which are ratios of tissue to sediment or soil concentrations. For prey items other than fish and aquatic birds, these BSAFs and BAFs were calculated by first pairing tissue concentrations with the mean PCB concentrations of the sediment or soil samples collected within the foraging range of each tissue sample location, and then using the median of the resulting distribution of individual BSAF or BAF values.[2] The final BSAFs and BAFs were based on the median of those distributions to avoid the undue influence of certain extreme outlying individual values that would have biased the means.

The calculations used to develop the target floodplain soil levels were based on the conservative assumption that mink forage exclusively within the "floodplain" of the PSA – defined as the area within the 1 mg/kg isopleth, which conforms generally to the approximate

[2] For fish, the BSAF was based on predictions from EPA's bioaccumulation model; and for aquatic birds, the BSAFs were based on an overall PSA-wide comparison of average tissue PCB concentrations with spatially weighted average PCB concentrations in sediment and soil.

10-year floodplain (except that it is narrower that the 10-year floodplain west of the railroad tracks in the southern half of the PSA) (BBL and QEA, 2003). GE recognized, however, that since mink are wide-ranging predators, they are unlikely to forage only within that artificial boundary, and that any mink that forage in the PSA are likely also to forage along tributaries of the River and in other areas (e.g., other portions of the 100-year floodplain) outside the 1 mg/kg isopleth. As a result, GE stated that the target floodplain soil levels would be adjusted in the CMS to account for the proportion of the mink's foraging range outside the 1 mg/kg isopleth.

In its July 11, 2007 conditional approval letter, EPA stated that the overall approach described in the Supplement is acceptable. However, EPA directed GE to make a number of changes in that approach that are very significant to the levels and the application of the target floodplain soil concentrations associated with the mink IMPGs. In particular, EPA directed GE: (1) not to use the entire PSA as the averaging area for application of the target sediment or floodplain soil levels, but rather to use averaging areas that are no larger than single subreaches (i.e., Reaches 5A, 5B, 5C, and 6, except that, due to limited floodplain, Reach 6 may be combined with Reach 5C); (2) not to adjust the target levels to account for foraging outside the defined floodplain; and (3) to recalculate the target floodplain soil levels using the mean, rather than the median, of the BSAFs and BAFs. As shown below, these directives contravene the proper focus of ecologically based remediation, are arbitrary and unjustified, and will result in an overestimate of mink's exposure to PCBs.

2. EPA's directives on averaging areas are inconsistent with the population-level focus of ecologically based remediation.

EPA's directives to limit the averaging areas for application of the target levels to subreaches of the PSA and only to the portions of each subreach within the 1 mg/kg isopleth are based on the assumed foraging or home areas of individual mink. Thus, in directing GE not to use the entire PSA as the averaging area, EPA stated that doing so "could inappropriately fail to consider impacts to mink whose foraging range does not exceed the area of a single subreach," noting that female mink have been documented to have home ranges within the extent of a single subreach. Similarly, in directing GE not to adjust the target levels to account for foraging outside the defined floodplain, EPA stated that "[t]he extent of the floodplain in [the PSA] is sufficiently large that the assumption of 100% residence is appropriately conservative for mink, particularly female mink, and especially during the reproductive period when the exposure to contaminants in the floodplain is most important."

These statements are based on assumptions or literature information regarding the home ranges of individual mink. However, as stated in EPA guidance, and as recognized in EPA's April 13, 2007 comments on the CMS Proposal (Condition # 8), the overall objective for ecologically based response actions is to "reduce ecological risks to levels that will result in the recovery and maintenance of healthy local populations and communities of biota" – not to protect "organisms on an individual basis" (EPA, 1999, p. 3). Establishment of an averaging area based on the foraging range of an individual mink or even a few mink is contrary to that objective. To protect the local population of mink utilizing the PSA, the averaging area should be based on the broader habitat used by that population.

Mink are solitary; their home ranges generally do not overlap with other individuals of the same gender (although the home range of a male may overlap with the home range of one or more females, particularly during the breeding season) (EPA, 1993, 2004; Weston, 2004). In addition, mink are semi-aquatic and require access to open water, with suitable cover (EPA, 1993, 2004; Weston, 2004). Mink also have fairly large foraging or home ranges. In riverine habitats, their home ranges tend to be linear, with reported estimates, based on the literature, of 1.6 to 3.6 miles (Woodlot Alternatives, 2002), 1 to 6 km (0.6 to 3.7 miles) (EPA, 2004), and 0.7 to 4.7 miles (Weston, 2004) along the shorelines; and these animals generally stay within about 200 meters of the shorelines (EPA, 1993, 2004; Allen, 1986). Based on this information, the PSA (which is about 10 miles long) would not support more than a subset of the local mink population – i.e., the local mink population in Berkshire County would extend well beyond the PSA. Indeed, EPA's own ERA states that the PSA could contain foraging ranging for "one to several mink," or "more if tributary habitat is included" (EPA, 2004, p. I-17). It further notes that, while some individual mink may forage inside the PSA, "some individuals may forage part of the time outside the PSA" (*id*., p. I-111). Even accepting these statements, they recognize that the mink using the PSA, as well as the tributaries and other areas adjacent to the PSA, are simply individuals which make up part of the local mink population.

In these circumstances, it is already conservative to use the PSA and the adjacent suitable habitat, including tributaries, as the averaging area for application of the target floodplain soil levels for mink. However, it is overly conservative and unjustified to require use of the individual subreaches, particularly if limited to the floodplain within the 1 mg/kg isopleth, as the averaging areas. Those areas would, at best, support only a relatively few mink, and thus are not appropriate for evaluating impacts to the local mink population.

3. The EPA-directed assumption that mink do not forage outside the 1 mg/kg isopleth is arbitrary given the foraging characteristics of mink.

Even if it were appropriate to focus only on mink that may use the PSA for foraging, and regardless of whether the entire PSA or the subreaches are used to establish the linear length of the averaging area(s), it is arbitrary to prohibit adjustments of the target levels to take account of the proportion of the mink's foraging range outside the 1 mg/kg isopleth. Even if it were *theoretically* possible for an individual mink to forage exclusively within the 1 mg/kg isopleth along the main stem of the river without ever going outside that area or up the tributaries, that is highly unlikely even for an individual mink, let alone for the subset of minks that may utilize the PSA.

As noted above, mink are wide-ranging, opportunistic predators that "often travel[] long distances between foraging locations or den sites" (Weston, 2004), with home ranges in riverine habitats extending linearly from around 2/3 of a mile to 3-5 miles along shorelines and laterally about 200 meters from the shorelines. As shown on Figure 1, the corridor that extends 200 meters from the shoreline on both sides of the River in the PSA goes beyond the 1 mg/kg isopleth in many areas, and there are also a number of tributaries that extend away from the River in the PSA beyond the 1 mg/kg isopleth. Based on the literature discussed above, it is reasonable to expect that mink utilizing the PSA would also use these areas outside the 1 mg/kg isopleth as part of their foraging range. By contrast, it is artificial and unreasonable to assume (as EPA would require) that such mink limit their foraging locations and den sites to areas within the 1 mg/kg isopleth or that mink in the PSA would hit a figurative "wall" and stop when they reach the 1 mg/kg isopleth.[3]

4. Given the extreme outliers and biased distributions of the individual BSAF and BAF values, use of the means of those values would overestimate mink's average exposure.

In directing GE to use the mean, rather than the median, BSAFs and BAFs, EPA stated that, "[b]ecause mink and other animals average their exposure spatially and temporally during feeding, the median will not account for bioaccumulation that occurs in the tails of the exposure distribution, even though such exposure can contribute significantly to total uptake," whereas "[u]se of the mean as the measure of central tendency will account for exposures throughout the entire range of the observed exposure distribution."

EPA's comments suggest that GE used the median exclusively in the calculation of the BSAFs and BAFs. In fact, as described in the Supplement and noted above, with the exception of fish and aquatic birds, the BSAFs and BAFs used to calculate target soil levels for mink were calculated using a two-step process which included the calculation of mean values.[4]

In the first step of the process, GE calculated the BSAF or BAF for individual organisms for each prey species collected from various locations within the floodplain. These calculations were based on sediment, soil, total organic carbon (TOC), lipid, and prey tissue concentrations available from the Housatonic River database (or, for muskrats, for which site-specific data do not exist, on data from the Kalamazoo River site). Based on the data available for each prey species, GE paired tissue concentrations with sediment and soil concentrations by identifying all sediment or soil data collected within the foraging range of each tissue sample location and calculating either the arithmetic mean or a spatially weighted mean PCB concentration and TOC of the floodplain soil and sediments to derive the BSAF or BAF for that tissue sample.

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[3] EPA has suggested that the mink observed in the PSA during both EPA's and GE's field studies of mink may have been just "transient" individuals passing through the area from adjacent areas (EPA, 2004, pp. I-76, I-113; Woodlot Alternatives, 2002, p. 6-14). If that is true, it provides further evidence that mink move in and out of the 1 mg/kg isopleth and do not honor such artificial boundaries in their search for prey.

[4] As also noted above, the fish BSAF were derived using EPA's bioaccumulation model, and the aquatic birds BSAFs were based on an overall comparison of average tissue PCB concentrations with spatially weighted average PCB concentrations in sediment and soil. In both cases, the resulting BSAFs are representative of a mean.

Using this process, distributions of the individual BSAF and BAF ratios calculated for the prey species were developed. However, there is significant uncertainty associated with these data because the data were not collected for the purpose of calculating BSAFs or BAFs, and thus the samples were often not co-located, the sample sizes were generally small, and the samples likely were not fully representative of the foraging range of the prey item sampled. Therefore, the ratios calculated do not necessarily provide an accurate representation of the relationship between sediment/soil and prey tissue concentration. This can result in anomalous ratios for individual prey items that distort the pooled BSAF or BAF for that species.

In this situation, GE reviewed the distributions of BSAFs and BAFs to determine the most appropriate measure of central tendency. That review indicates that use of the mean value of the distributions would result in estimates that are biased high due to the inclusion of a few extreme values. For example, for amphibians, over 60% of the frog BSAFs are less than one, yet a single frog had a BSAF of 156 (see Table 5-2 in Supplement). This skewed distribution is shown on Figure 2. As a result of this skewed distribution, the mean value is approximately 14 times higher than the median, and the inclusion of the single extreme BSAF, by itself, results in more than a three-fold increase in the mean BSAF, demonstrating how an extreme value can distort the estimate of the central tendency for the population of BSAF ratios.

Other examples of the effects of extreme values can be seen for the BSAF for muskrats and the BAF for small mammals. For muskrat, nearly 60% of the BSAF ratios fall bellow 1 but the highest ratio is more than an order magnitude higher (Figure 3). This extreme ratio results in a mean BSAF that is more than 25 times higher than the median value. A similar situation is seen for small mammals where over 75% of the BAF ratios fall below 1 but the highest BAF is 15-fold higher (Figure 4). Again, this extreme value results in a distortion of the mean value, resulting in a mean that is 3.2 times higher than the median.

It is unlikely that an individual prey animal would bioaacumulate PCBs at a rate so much greater than the average rate for the other animals in that species. Rather, these extreme values more likely represent artifacts associated with the pooling of the sediment and soil data used in calculating the BSAF and BAF ratios and uncertainty associated with the limited number of sediment and tissue samples evaluated. This is illustrated by a closer examination of the extreme values. For example:

- The frog that had a BSAF of 156 (a leopard frog) had a tissue PCB concentration of 5.15 mg/kg and was collected from a pond (W-1) with a very low sediment PCB concentration (0.4 mg/kg). The other leopard frogs from the same pond had much lower tissue PCB concentrations – 0.03 and 0.15 mg/kg (Table 5-2 in Supplement). Moreover, other frogs with tissue PCB concentrations comparable to that in the frog with the extreme BSAF (~ 5 mg/kg) came from ponds with much higher PCB concentrations (Table 5-2 in Supplement). These factors indicate that the frog with the BSAF of 156 likely obtained its PCBs from sources other than the pond where it was collected (possibly an adjacent pond, E-1, located within 1500 feet of pond W-1, with a sediment PCB concentration of 26.6 mg/kg).

- The muskrats with the highest BSAFs had tissue concentrations comparable to those in the other muskrats, but were associated with very low sediment PCB concentrations (see Table 5-6 in Supplement). Indeed, for one of those muskrats, no sediment concentrations were available within the assumed foraging range of 300 meters, and hence a sample from a greater distance, 2700 meters, was used. In this situation, it seems likely that the sediments with the low PCB concentrations were not the only source of PCBs to the outlier muskrats.[5]

- The small mammal (a shrew) with the extreme BAF had a tissue concentration that was among the lowest for shrews (10.68 mg/kg), but the soil samples within its foraging range were very low, averaging 0.7 mg/kg – the lowest of all the soil concentrations used for shrews (see Table 5-8 in Supplement). Again, this suggests that the estimated soil concentration associated with this shrew is not representative of the actual area where the shrew foraged and that the shrew likely bioaccumulated PCBs from other sources.

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[5] A paper published in a peer-reviewed journal using the same Kalamazoo River muskrat data used in the Supplement calculated a BSAF of 0.06, based on the ratio of the geometric mean of the lipid-normalized PCB concentrations in the tissue divided by the geometric mean of the organic carbon-normalized PCB concentrations in the sediments (Kay et al., 2005). This BSAF is less than half of the BSAF used by GE in the Supplement (0.14), based on using means to determine the exposure for each muskrat and the median of the resulting BSAF distribution.

In these circumstances, given the likelihood that the extreme ratios in the distributions represent artifacts rather than an accurate representation of PCB bioaccumulation by the prey animals, it was appropriate to use a statistical descriptor of central tendency that does not give undue weight to those values.[6] Further evidence that the median BSAF more accurately represents actual conditions is provided in Figure 5, which provides a comparison of the measured frog tissue concentrations to the concentrations predicted based on both the mean and median BSAF values for frogs. For all sediment concentrations evaluated, the median BSAF provides a much closer estimate of actual frog tissue concentrations than the mean BSAF. Tissue concentrations based on the mean BSAF are consistently overestimated, frequently by orders of magnitude.

GE recognizes that, as noted in EPA's comments and stated in EPA guidance on calculating the concentration term in risk assessment (e.g., EPA, 1992, 2002), the arithmetic mean is generally more representative of the average concentration to which receptors are exposed at a site over time. However, this principle of spatial and temporal averaging focuses on a single concentration term (rather than a set of ratios), and it is still important to take account of the underlying assumptions (e.g., random sampling, single populations, etc.) and outliers. EPA's 1995 *Guidance for Risk Characterization* notes, as a general matter, that the selection of whether to use the mean or the median in risk characterization "will depend on the available data and the goals of the assessment" (EPA, 1995, p. 14). More recently, draft EPA guidance on estimating BSAFs states that the overall BSAF should be determined from the individual BSAFs using "the most appropriate (unbiased) averaging technique based upon the underlying distribution of the BSAFs" (Burkhard, 2006, p. 10).

In this case, as described above, there are numerous uncertainties associated with the BSAF and BAF estimates, which can be compounded because they involve ratios of multiple concentration terms. Extreme values in the denominator or numerator and/or small measurement errors can result in much larger errors in the ratio, affecting the variance, shape,

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[6] Moreover, even if the extreme values accurately represented the bioaccumulation in individual prey animals at that extreme end of the distribution, those prey would only be consumed by a very few, if any, mink. As shown in Section 1.a above, the objective of ecologically based remediation is not to protect such individuals, but to protect local populations and communities.

and number of extreme values (both high and low) that define the distribution of BSAFs or BAFs. Given the extreme values present in the individual BSAFs and BAFs for many of the prey species, resulting in positively skewed distributions, use of the median of the individual BSAFs and BAFs is "the most appropriate (unbiased) averaging technique," and thus GE reasonably determined that use of the median is a more appropriate descriptor of the central tendency than the arithmetic mean. This approach reflects a more realistic estimate of the actual bioavailability of PCBs in the PSA by addressing the obvious biases within the datasets for individual prey species. Basing individual BSAF/BAF values for each sample pair on means of the sediment/soil data preserves the relationship between sediment and biota concentrations recommended by EPA, while using the median as the summary statistic for all BSAFs and BAFs controls for potential biases in this particular data set.

By contrast, given the skewed distributions of the BSAF/BAF values, requiring use of the means of those distributions would give undue weight to extreme values that are likely a result of uncertainty within the data set, rather than being truly representative of the prey animals' PCB bioaccumulation. This requirement would thus lead to substantial overestimates of the average exposure of mink to PCBs (as illustrated on Figure 5). Further, it would result in overly conservative target floodplain soil concentrations that are unachievable in some subreaches at all target sediment concentrations and in other subreaches at most target sediment concentrations. Accordingly, EPA's directive to adopt this approach in these circumstances is unjustified and arbitrary.

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Project #20869.005
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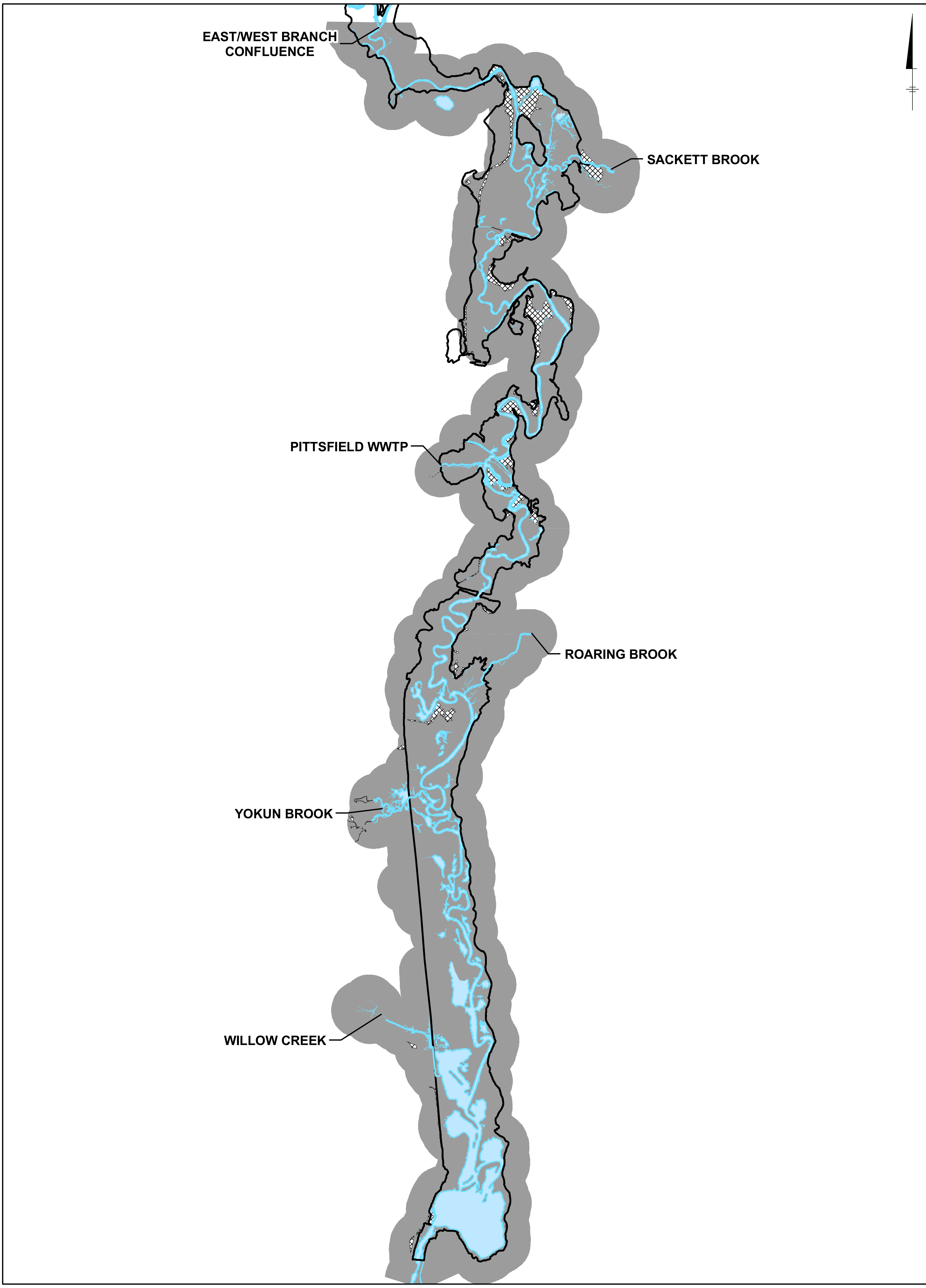

LEGEND

- PCB 1 MG/KG ISOPLETH
- MINK HABITAT
- WATERBODIES
- UNSUITABLE MINK HABITAT

NOTES:

1. MINK HABITAT (GRAY) IS DEFINED AS SUITABLE HABITAT WITHIN A 200-M DISTANCE OF ALL WATERBODIES INCLUDING THE RIVER MAINSTEM, BACKWATERS, PONDS, AND TRIBUTARIES (EXTENDING APPROXIMATELY 0.75 KM FROM THE MAINSTEM).
2. TRIBUTARIES ARE LABELED

0 2,000 4,000 Feet
GRAPHIC SCALE

LOCATION OF MINK HABITAT AND 1 MG/KG PCB ISOPLETH

ARCADIS BBL
infrastructure, environment, facilities

FIGURE
1

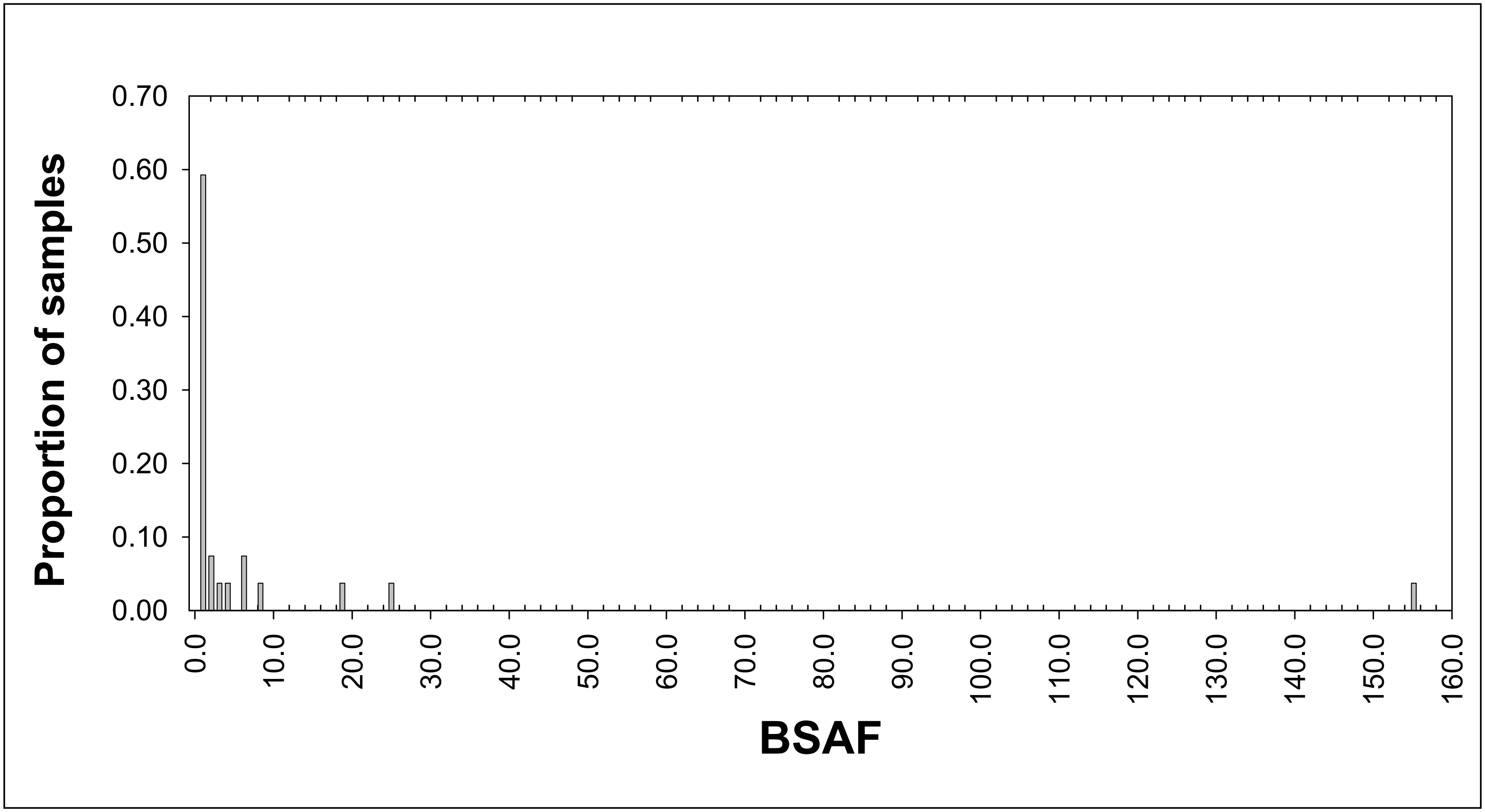

Figure 2. Histogram showing skewed distribution of frog BSAFs.

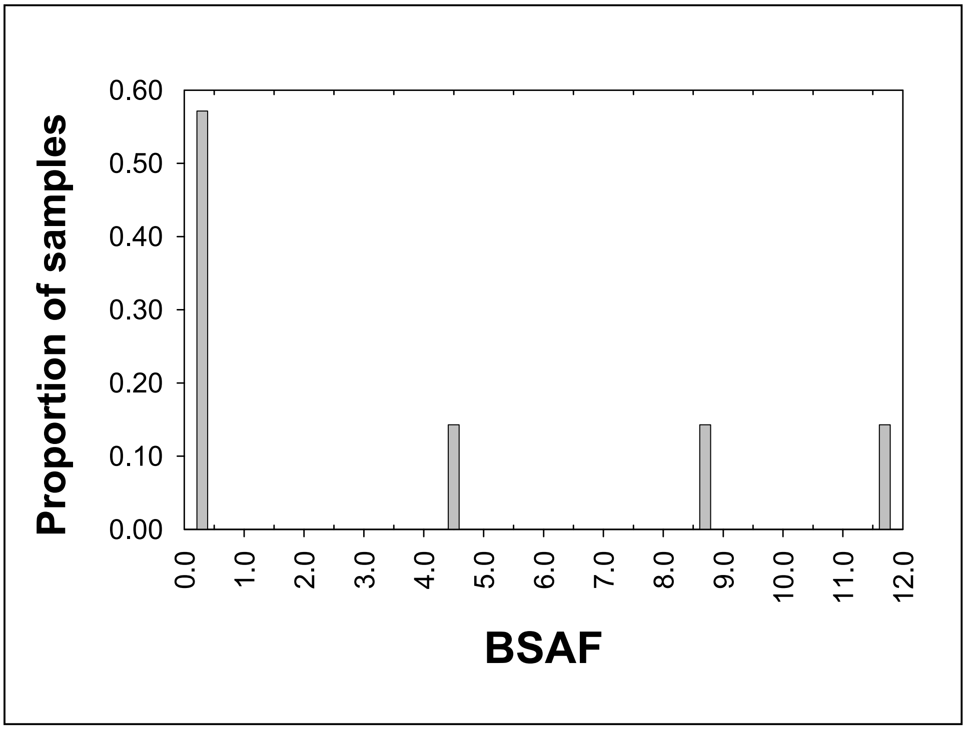

Figure 3. Histogram showing skewed distribution of muskrat BSAFs.

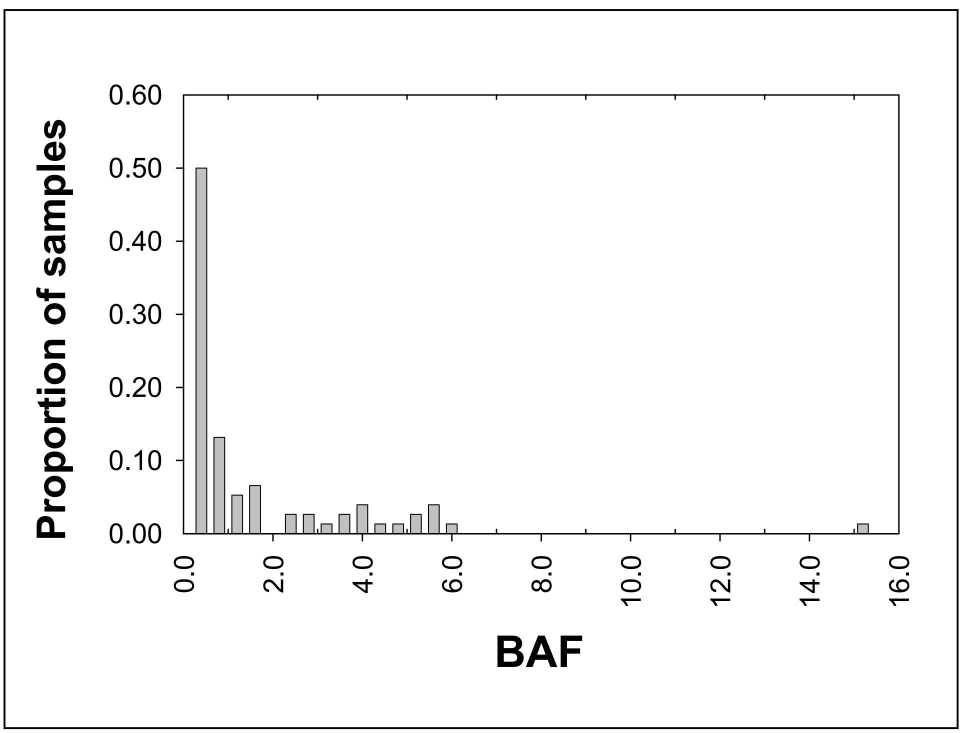

Figure 4. Histogram showing skewed distribution of small mammal BAFs.

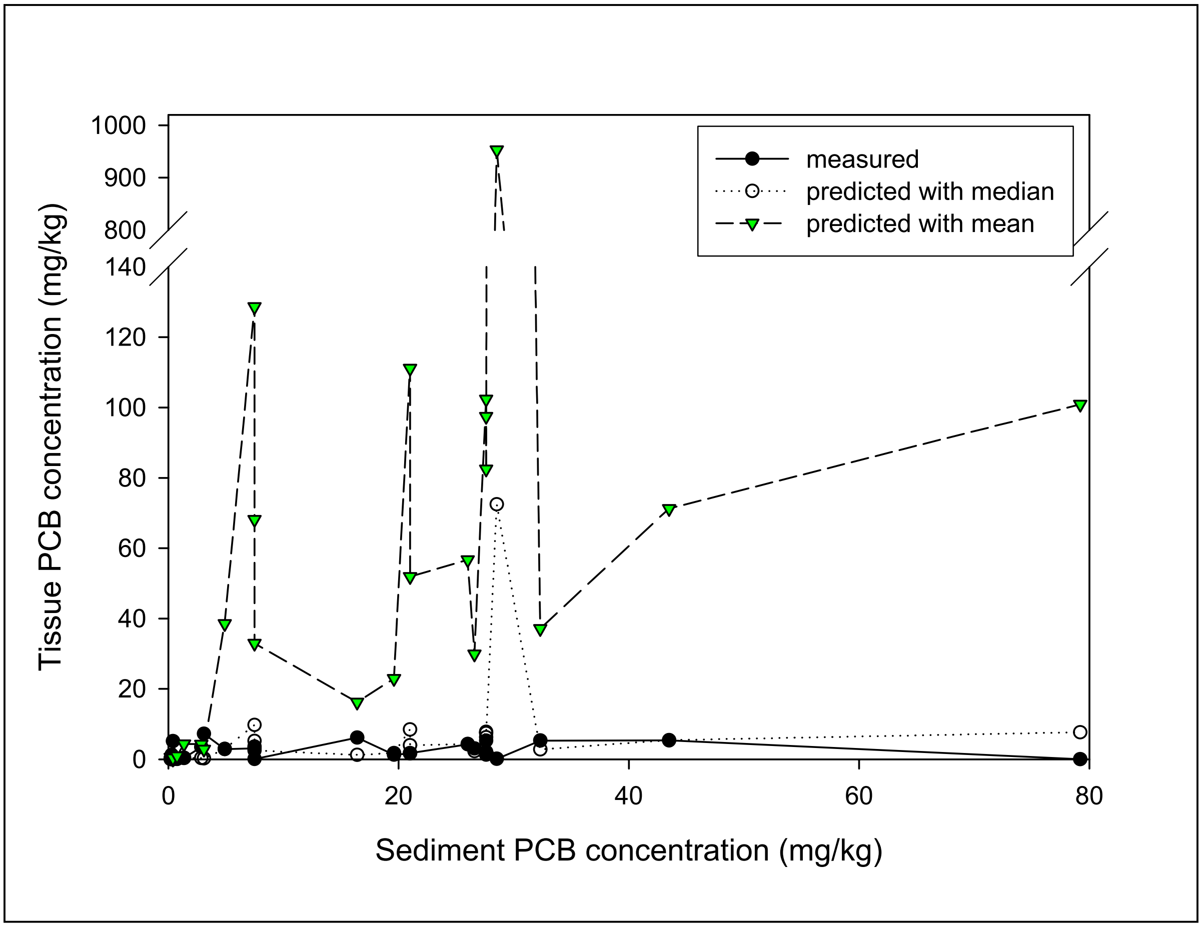

Figure 5. Predicted concentrations of PCBs in frog tissue using median and mean BSAFs compared to measured tissue PCB concentrations.