Feb 28, 2011	UPDATE	EAB COST CALCULATOR MANAGEMENT PLANS
Management Plan	Description	Why Important
Remove all	All ash trees will be removed. No trees will be replanted.	After the EAB comes to your city you will have to remove the ash trees in order to prevent dead trees from falling on people or property and causing harm. Although this plan has the lowest long term out of pocket expenses it removes valuable healthy trees that may be saved with insecticides. Depending on local costs for pesticide treatment and removal, large trees can be less expensive to protect than to remove.
		In the long term from this plan causes the greatest losses to the aesthetic, ecological value that ash trees provide your city. Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size in comparison to plans that replace the ash trees which have been removed.
Replace All	All ash trees will be removed and replaced with a new tree.	This option replaces every ash tree with a new tree that won't get emerald ash borer. No pesticides are applied. In time the ash forest will be replaced with a different forest. Depending on local costs for pesticide treatment and removal, large trees can be less expensive to protect than to remove.
		Although based on out of pocket dollars this plan is the least costly way to manage your forest and allow it to regain its former size, it discards many healthy trees that provide real economic value to the city. Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size.
Treat All	All ash trees will be treated with insecticides.	This plan has the lowest annual out of pocket cost, but the greatest costs over time. Costs of treatment can be reduced if you are strategic about the trees in which you invest treatment dollars. In most urban forests there are trees that are in poor condition or in poor sites that are simply not worth saving. Depending on local costs for pesticide treatment and removal, healthy large trees can be less expensive to protect than to remove.
		Research demonstrates that insecticides can protect healthy trees until they reach a 25" DBH. Research with recently available products is still underway to determine the size limit of trees that can be protected. For more information please see this link :
		Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size.

Remove > 12	All large trees (DBH>12") will be removed and none will be replaced. Smaller trees (DBH<12") will be treated with insecticides on a regular basis.	This plan examines cost of simply removing trees that are larger than what can be protected for the next 25 years if tree caliper (DBH) expands at rate of just under 1/2" per year based on published research. Protection of trees larger than this size is possible and worth considering due to the economic value they provide to the urban forest. Research with recently available products is still underway to determine the size limit of trees that can be protected. For more information please see this link:
		Depending on local costs for pesticide treatment and removal, healthy large trees can be less expensive to protect than to remove. Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size in comparison to plans that replace the ash trees which have been removed.
Replace > 12	All large trees (DBH>12") will be removed and replaced. Smaller trees (DBH<12") will be treated with insecticides on a regular basis.	This plan examines cost of removing and replacing trees that are larger than what can be protected for the next 25 years if tree caliper (DBH) expands at rate of just under 1/2" per year based on published research. Protection of trees larger than this size is possible and worth considering due to the economic value they provide to the urban forest. Research with recently available products is still underway to determine the size limit of trees that can be protected. For more information please see this link:
		Depending on local costs for pesticide treatment and removal, large, healthy trees can be less expensive to protect than to remove. Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size.
Replace < 12	All small trees (DBH<12") will be removed and replaced. Smaller trees (DBH<12") will be treated with insecticides on a regular basis.	This plan examines cost of removing trees that are larger than what can be protected for the next 25 years if tree caliper (DBH) expands at rate of just under 1/2" per year based on published research. Protection of trees larger than this size is possible and worth considering due to the economic value they provide to the urban forest. Research with recently available products is still underway to determine the size limit of trees that can be protected. For more information please see this link:
		Depending on local costs for pesticide treatment and removal, large, healthy trees can be less expensive to protect than to remove. Use the graph of forest size (Total DBH over Time) to

Replace< 6 and > 12	All large trees (DBH>12") will be removed will be replaced. Small trees that are inexpensive to remove (DBH< 6")will also be replace. Remaining trees (between 6 and 12" DBH 12) will be treated with insecticides on a regular basis.	determine how long it will take the forest to get back to its original size. This plan removes the very small and medium to large trees. It saves only smaller trees (6-12" DBH) which are more valuable than the very small trees (< 6" DBH) that have been recently planted. It removes trees that are larger than what can be protected for the next 25 years if tree caliper (DBH) expands at rate of just under 1/2" per year based on published research. Protection of trees larger than this size is possible and worth considering due to the economic value they provide to the urban forest. Research with recently available products is still underway to determine the size limit of trees that can be protected. For more information please see this link. Depending on local costs for pesticide treatment and removal, large, healthy trees can be less expensive to protect than to remove. Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size.
Replace < 24	All large trees (DBH>12") will be removed will be replaced. Small trees that are inexpensive to remove (DBH< 6")will also be replace. Remaining trees (between 6 and 12" DBH 12) will be treated with insecticides on a regular basis.	Recent studies by economists (Kovacs et al. 2010) indicate that this strategy allows city forests to get the most value from existing ash trees. It also assumes technology exists to save large trees. Research with recently available products is still underway to determine the size limit of trees that can be protected. For more information please see this link . Use the graph of forest size (Total DBH over Time) to determine how long it will take the forest to get back to its original size.



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