CITY OF OLYMPIA
SPECIAL STUDY SESSION
MINUTES
May 4, 2004

A Special Study Session of the Olympia City Council convened at 5:30 p.m. on May 4, 2004. Those in attendance were Mayor Mark Foutch, Mayor Pro Tem Laura Ware, Curt Pavola, Matthew Green, Doug Mah, TJ Johnson, and Jeanette Hawkins.

Use of Herbicide, Triclopyr, to Control Eurasian Water Milfoil in Capitol Lake

Mr. Emmett Dobey, Program and Policy Development Division Manager, outlined the meeting agenda with a goal to give direction to Councilmember Ware about the Council's position regarding the use of triclopyr in Capitol Lake to control milfoil.

Mr. Dobey said the issue of using herbicides in Capitol Lake to control milfoil is in its second year of community discussion. Last year, the discussion centered on the use of Sonar, a different type of herbicide. After much discussion at the Capitol Lake Adaptive Management Plan (CLAMP) Steering Committee, there was a decision of considering the possibility of allowing a back flush of saltwater for a one time application to control milfoil. However, after some study, the process was discounted. The process reconvened in January 2004 to consider other means of treatment, which now includes an option to use triclopyr to treat milfoil.

On April 14, the Department of General Administration (GA) hosted a public meeting. Mr. Dobey referred to the minutes of the public meeting. Since the staff report was prepared, the City has received 16 emails about needing more information for treating the lake, expressed opposition of treatment with triclopyr, and some in favor of using the herbicide. During the April 14 meeting, there was request for GA to prepare more information about a monitoring plan and an overall project proposal. An application process proposal was distributed to the Council.

Mr. Dobey briefed the Council on Parks and Recreation program on Capitol Lake to include sailing, windsurfing, and providing access to the lake for canoes and kayaks. Due to the earthquake, recreational activities were halted as it was difficult to access the lake when Marathon Park was closed. There is interest in maintaining the lake for access for canoes and kayaks. Since the earthquake, windsurfing and sailing activities moved to Swantown. Staff does not believe even with the control of milfoil, windsurfing and sailing activities will move back to Capitol Lake.

GA Senior Planner Dave Schilperoort said GA's goal is to encourage all types of recreational activities on the lake as Marathon Park is now open.

Mr. Schilperoort said on May 6, the steering committee will consider the use of triclopyr in Capitol Lake to control milfoil. Staff will recommend the committee proceed with the application process and monitoring plan. The application process would occur in July. No dates have been established. There would be two

applications with the first in the south and middle basin followed by another application in approximately 10 days in the north basin. Dual application would reduce the impact on dissolved oxygen in both the lake and Budd Inlet. During the application, the gates to the dam and fish ladder will be secured and closed for a minimum of two days to maintain the herbicide in the lake. The step is precautionary, although GA believes there would be no difference in impacts in the saltwater area of Budd Inlet as opposed to the freshwater in the lake.

Ten days prior to application, all property owners adjacent to the lake will receive written notification. Signs will be posted around the lake. The application is anticipated to be made at a maximum rate of 2.5 parts per million from a boat with hoses extended down into the water. There will be no aerial application of the herbicide. The application process will be monitored by GA and the Departments of Ecology and Agriculture. Per the triclopyr label, there are no restrictions on the use of the water for recreational purposes, to include swimming and fishing. However, the DOE will impose a 12-hour swimming restriction due to the possibility of eye irritation.

GA selected July because it is the preferred timeframe with fish and wildlife and also to address a potential impact to bats that frequent Capitol Lake.

Mr. Schilperoort reported the monitoring program is under the development of the DOE, Department of Agriculture, Thurston County Environmental Health, and GA. The plan will be finalized by the May 6 committee meeting. The outline provided to the Council includes some of the elements that will be used to establish baseline data and after application, follow-up information will include residue samples, frequency of occurrence, dissolved oxygen, and sediment samples both in the lake and Budd Inlet.

GA's long-term goal is not to allow milfoil to re-establish. The treatment is anticipated to be effective on 95% of the milfoil. Some milfoil will survive and GA's long-term plan calls for surveys of the lake in June, July, and August. As plants are discovered, other methods of removal will be undertaken other than chemical. GA is committed to the plan and to destroying milfoil in the lake. Milfoil was discovered in the lake in September 2001 but was present in the lake prior to that date.

Mr. Schilperoort reiterated the application will only kill the milfoil and other aquatic life will remain intact and will not be impacted. Staff recommends commencing the process in July. He noted the application concentration is equivalent to 10 drops from an eye dropper into a 55-gallon drum.

Mayor Foutch asked about the plans GA will take if dissolved oxygen levels are compromised by the application. Mr. Schilperoort said the discovery would be documented. However, there is nothing GA could do to raise the level of dissolved oxygen. Triclopyr decomposes milfoil over time. GA believes there will be no problems with dissolved oxygen.

Councilmember Pavola asked if there is a way to aerate the lake to increase oxygen levels. Mr. Schilperoort said the inventory of aquatic plants would likely result in high levels of dissolved oxygen.

Councilmember Pavola asked why triclopyr targets only milfoil and what are other less intrusive ways to deal with milfoil. Mr. Schilperoort said triclopyr was developed to specifically kill milfoil and other similar plants. The product is absorbed in the systemic system of the plant and is designed to kill milfoil. Councilmember Ware added triclopyr is designed to kill a specific plant structure. There are no other similar plant structures in the lake. She noted the concentration does not matter, it is still a chemical.

Mr. Schilperoort said the dose differentiates a poison from a remedy. The same analogy can be applied to

triclopyr.

Mr. Schilperoort said the committee explored three other chemicals, which were eliminated due to the public's connotation of using a bad chemical. Also explored was harvesting, application of milfoil weevils, and grass carp. However, the infestation is at a point where it needs to be controlled before any other realistic option can be used.

Councilmember Mah asked if the application will be a one-time event. Mr. Schilperoort said the application is scheduled for July. The plan is to control milfoil infestation with non-chemical means.

Councilmember Mah inquired about the quantity of the application. Mr. Schilperoort said it is unknown as the applicator will need to survey the lake to determine the application amount. Councilmember Mah asked what safeguard measures would be in place to prevent an over application of triclopyr. Mr. Schilperoort said the applicator will be a licensed applicator and the actual application will be overseen by a number of agencies. He offered to provide access on the boat for a committee member to oversee the process. Tests reveal that impacts to fish and wildlife begin to occur at 100 parts per million.

Councilmember Hawkins asked whether GA has factored the cost of the monitoring program. Mr. Schilperoort said the monitoring program will be approximately $35,000 per year. The monitoring program under development for pre and post-application and costs have not been determined. The application of triclopyr should not exceed $150,000.

Councilmember Johnson referred to other information about triclopyr that indicates impacts would be seen in amounts significantly less than 100 parts per million but rather in the order of 25 to 30 parts per million. Councilmember Johnson asked whether there is any independent research that indicates triclopyr is either harmless or harmful in the marine environment. Mr. Schilperoort said one of the confusing issues about triclopyr is that there are two different formulas of the chemical. One formula is commonly used in the timber industry to destroy competing trees. A number of people have confused that formula and its land-base use with what could occur in the marine environment. The chemicals are different. It will be important to ensure the right analysis of triclopyr is being considered. Mr. Schilperoort described why triclopyr is not certified for saltwater use.

Mr. Schilperoort addressed questions about the chemical breakdown of triclopyr and its half-life, which is seven days.

Councilmember Johnson asked whether GA is confident that chemical control of milfoil now will ensure other means of control will be effective in future years to avoid re-use of a chemical application to the lake. Mr. Schilperoort said it is GA's goal to control the milfoil in future years without the use of herbicides.

Mr. Schilperoort noted the herbicide has been researched and produced by Dow Chemical Company for the last 20 years. However, it was only recently approved the State of Washington. There was external use of triclopyr on Diamond Lake in eastern Washington, which was successful. The use is new in the state and its use in an area that flows into saltwater is also new. This is one of the reasons for an aggressive monitoring program. GA is also considering publishing monitoring reports so that others can learn from the application.

Mr. Dobey indicated precedence has been established by Thurston County for chemical application of lakes that reveal chemical applications have been demonstrated to be a successful one-time use followed by

mechanical measures for controlling invasive plants.

Councilmember Hawkins inquired about the control of the annual monitoring budget. Mr. Schilperoort explained GA's budget process.

Councilmember Pavola inquired about saltwater back flushing conducted in the past and why the option was rejected. Mr. Schilperoort said back flushing with saltwater was common up to 1997. At that time, the CLAMP Steering Committee was formed to manage the lake. The committee recommended not back flushing the lake and retaining the body as a lake environment. A part of the construction for Heritage Park includes mitigation areas, which requires maintenance. Saltwater is a very effective and toxic herbicide.

Councilmember Pavola inquired about the July timeframe and potential impacts to insects and bats. Mr. Schilperoort said the application in July would be preferable as baby bats should be completed with nursing. GA selected the date to mitigate potential damage to bats.

Councilmember Ware shared her initial preference for back flushing as it was possible the system would eventually convert to an estuary. However, after realizing an estuary alternative world likely not occur for at least 10 years, she considered herbicide as a viable while not preferred option. She asked about the effectiveness of using weevils. Mr. Schilperoort said weevils have been used to control milfoil. He indicated he has used both weevils and grass carp in Lewis County. Grass carp are fish that eat vegetation. Weevils are small bugs that eat milfoil. Weevils will be considered as a maintenance option once the lake is under control.

Councilmember Green said it appears all the details of the application plan have not been finalized. He asked whether GA would be willing to have City staff review the details of the application plan prior to the first application. Mr. Schilperoort agreed with the request.

Mr. Roy Iwai, Research Analyst, summarized staff's recommendation. He noted there is data on the half life of triclopyr and toxicity levels. Bird and mammals have been tested and in terms of the testing and literature, triclopyr is fairly safe to use. What are not known are the long-term or chronic affects with existing pollutants located in the lake. The product does degrade quickly. When compared to the success of other methods in terms of price and other factors, it makes sense to treat the lake now in order to ensure future management. The combination of the all the factors point to a good case for using triclopyr. Staff recommends applying triclopyr. Given some of the unknowns, it will be important to conduct monitoring.

Mr. Schilperoort invited Mr. Iwai to become a member of the monitoring committee.

Councilmembers and staff discussed the position of other CLAMP members concerning the proposed application.

Councilmember Ware advised the Council the biggest public concerns are the unknowns associated with triclopyr. She indicated she is frustrated that there are limited options for treating the lake. She noted the personal decision has been difficult and that she would prefer not using a chemical in the lake because the long term impacts to the environmental are unknown. She acknowledged milfoil also creates another set of problems that must be addressed. A potential decision concerning an estuary is a decision that is at least ten years in the future.
Councilmember Mah suggested Councilmember Ware should attend the CLAMP meeting and express her concerns and advocate for staff's recommendation along with a focus on long-term monitoring.
Councilmember Ware said during the public meeting, she had concerns with much of the information

provided by the distributor of the product as opposed to independent research.

Councilmember Hawkins commented that the whole point about the CLAMP Steering Committee is that is should be managing the lake environment based on adaptive science. She suggested that if the application of triclopyr is an example of the committee's good work, then the committee has not performed good work. She acknowledged the issues associated with budgets and politics but said she doesn't understand why it will take 10 years to reach a decision about the lake environment. She indicated she would not support the application of triclopyr even though the choices are limited. She cited her father's work as a chemical engineer and noted chemical application is not compatible with the values of the community and will contribute to a problem. Decisions are never made and are deferred and pushed out while priorities change. If adaptive management is going to be based on science and what will work for the lake, the proposed herbicide is just another short-term decision.

Mr. Schilperoort addressed the feasibility study and stressed it is unknown whether a healthy and sustainable estuary is even possible. That's why the study is being undertaken. If an estuary is feasible, there would be major hurdles to address and approvals would need to be secured. He added to obtain a chemical license in today's environmental by the federal and state government; a company must undertake a tremendous battery of tests. Triclopyr, even though it is relatively new, is still 20 years into the history of testing.

Councilmember Pavola shared his thoughts and his working experience and exposure to using chemicals to control invasive species. He said he supports the one time use of triclopyr but it is not the long-term solution. Monitoring will provide the long-term solution.

Councilmember Johnson noted although it is unknown that a healthy sustainable estuary is possible, it is known that a healthy sustaining lake is not possible and it will require constant intervention in the form of dredging, chemicals, or other various management activities. The system is a dysfunctional ecosystem and putting non-native chemicals only makes it more dysfunctional. He said he doesn't have confidence in the testing and registration process because for 50 years chemical companies developed chemicals that they assured the public were safe. Later, the world learned DDT and Agent Orange were not safe. Now, there are tens of thousands if not hundreds of thousands of chemicals and no idea how they are interrelating in the environment and the toxic mix in water and the air. He doesn't favor using a poison in the lake but might if it were to remain a lake. The lake is filling in and no dredging is occurring. The ecosystem is changing. Part of the problem will resolve with the sediment accumulation in the middle basin. The information presented by the public raises some serious questions about the safety of the herbicide. Money and resources spent on the effort could have been better spent on the estuary study.

Councilmember Green said initially he was leaning in support of the chemical application. However, that support is slipping away. He indicated he does not have much confidence in GA. He noted the literature appears to be "cheerleading" from the chemical company. There is no information that triclopyr is not harmful in saltwater as it is not registered for use in saltwater. He would prefer to invest the funds into an estuary study.

Mayor Foutch noted although it is a "lousy" choice he would support the application.

Mayor Foutch adjourned the meeting at 6:47 p.m.

Prepared by: Valerie Gow, Recording Secretary