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2 A MOTION stating the Flood Control District Zone District
3 executive committee's intent to include the Willowmoor
4 Floodplain Restoration Project in the Sammamish Capital
5 Investment Strategy, explore near-term mitigation strategies for
6 Lake Sammamish property owners, and continue to pursue permits
7 required for ongoing maintenance of the Sammamish River
8 Transition Zone.

9 ..body

10 WHEREAS, the Willowmoor Floodplain Restoration Project ("the Willowmoor Project")
11 proposes to reconfigure the Sammamish River Transition Zone ("the Zone") and adjacent
12 undeveloped King County property, and

13 WHEREAS, the Zone was constructed as part of the overall Sammamish River
14 Improvement Project ("the Improvement Project") in the 1960s by the U.S. Army Corps of
15 Engineers ("the Corps") in cooperation with King County primarily to control flooding in the
16 Sammamish river valley, and

17 WHEREAS, King County is responsible for maintaining the Improvement Project
18 through an operation and maintenance agreement with the Corps, and

19 WHEREAS, the King County Flood Control Zone District ("the District"), through the
20 King County water and land resources division as its service provider, provides funding for and
21 conducts regular maintenance of the Zone, including mowing, trimming, removal of vegetation,
22 removal of accumulated sediments in the channel and associated mitigation efforts, and

23 WHEREAS, state agency and tribal government representatives have expressed concern
24 that those maintenance actions adversely affect water quality and habitat and are in conflict with

25 federal, state and local efforts to protect and enhance riverine habitat for recovery of salmon
26 species listed under the federal Endangered Species Act, and

27 WHEREAS, in recent years, property owners around Lake Sammamish have expressed
28 concerns about high lake levels impacting their properties, and

29 WHEREAS, the Willowmoor Project was created with the intent to reduce the frequency
30 and duration of high lake levels while maintaining downstream Sammamish river flood control
31 performance, and

32 WHEREAS, since mid-2013, the District's service provider, the King County, has been
33 collecting data, conducting technical analyses and developing a suite of conceptual design
34 alternatives for the Willowmoor Project, and

35 WHEREAS, the District has funded and implemented a variety of means to engage
36 various stakeholders and the public during the conceptual alternative development process for
37 the Willowmoor Project, and

38 WHEREAS, in parallel with the process for developing options for reducing lake levels
39 with reconfiguration within the Zone, eight cold-water supplementation concepts were identified,
40 developed, analyzed and compared as a tool for reducing fish morbidity, and

41 WHEREAS, on June 6, 2016, the District executive committee approved Motion 2016-
42 04.1, which provided direction to proceed to 30 percent design with the Project, including, in
43 part: developing the split channel alternative in such a way that balanced the objectives of flood
44 control, habitat restoration, fish passage and sustainability; conducting a feasibility analysis of a
45 dynamic weir that included costs and benefits; developing a maintenance plan for when the
46 project is complete; pursuing grant sources and identifying funding partners to further evaluate
47 cold water supplementation and assume ongoing maintenance costs should the option be
48 selected; and continuing existing maintenance during design and permitting phases, and

49 WHEREAS, King County prepared a report dated May 22, 2018, in response to the
50 issues listed in Motion 2016-14.1. The report, using the "Modified Existing Conditions HEC-
51 RAS" model for lake levels, indicated that there was no significant difference in flood risk
52 reduction between the wide and narrow side channel alternatives and that the manually operated
53 weir, which assumed adjustments in weir height only on a seasonal basis, was not expected to
54 reduce lake levels for a significant number of flood days, and

55 WHEREAS, the District requested King County evaluate the flood risk reduction of a
56 dynamic weir, which could be adjusted with greater frequency and in anticipation of major
57 weather events. In response, the county prepared a progress memorandum for an addendum to
58 the weir analysis dated July 5, 2019, using the "Contemporary Conditions spreadsheet." The
59 analysis preliminarily indicated a 25 percent to 47 percent reduction in flood days exceeding lake
60 elevation of 27 feet was possible using a remote dynamically operated weir, and

61 WHEREAS, the July 5, 2019 progress memorandum included a sensitivity analysis that
62 indicated the consequence of incorrect parameter estimation for downstream risks was very high,
63 and could have negative consequences on the city of Redmond's stormwater infrastructure, and

64 WHEREAS, in June 2020 the final Remotely Operated Dynamic Weir Analysis
65 Addendum Technical Memorandum confirmed the preliminary results of the July 5, 2019
66 progress memorandum, and

67 WHEREAS, because the results of the 2018 and 2019 analyses varied significantly due to
68 differences in data availability and model setup, the District requested a third-party review of the
69 models and analysis to inform further decision making for the Willowmoor Project, and

70 WHEREAS, the District issued a request for proposals for a third-party evaluation in
71 2019 and again in 2020 and no responses were received in either cycle, and

72 WHEREAS, in February 2020, Lake Sammamish experienced historic flooding, resulting
73 in damage to property including docks, crawlspaces and small outbuildings around the lake; and

74 WHEREAS, climate change is projected to increase the frequency and intensity of heavy
75 rainfall events in King County in coming years, increasing the potential for high lake level events
76 and associated flooding around the lake, and

77 WHEREAS, the impact of climate change makes adaptation and mitigation necessary, in
78 addition to flood risk reduction efforts, and

79 WHEREAS, uphill development around Lake Sammamish and in tributary stream basins
80 has resulted in increased runoff into the lake during storms, and

81 WHEREAS, Lake Sammamish and the Transition Zone are integral parts of the
82 Sammamish River basin and that changes in one part of the basin, including tributaries to the
83 Sammamish River, have implications for other parts of the basin, and

84 WHEREAS, the Sammamish river capital investment strategy is intended to take a
85 comprehensive look at the entire Sammamish river basin in collaboration with the Corps, cities
86 and other stakeholders and to update the capital investment and maintenance strategy for meeting
87 the flood risk reduction, fish habitat, and navigability requirements of the Corps's 1964
88 operations & Maintenance Manual, and

89 WHEREAS, on June 16, 2020, the District executive director approved the Sammamish
90 river capital investment strategy work program authorization, which did not include the
91 Willowmoor Project because the third-party review had not been completed, and

92 WHEREAS, the 2021 adopted District budget includes an additional \$1,000,000 for the
93 Willowmoor Project;

94 NOW THEREFORE BE IT MOVED BY THE EXECUTIVE COMMITTEE OF THE KING
95 COUNTY FLOOD CONTROL ZONE DISTRICT:

96 SECTION 1. In coordination with King County as the District's service provider, the
97 District will:

98 A. Update the Sammamish river capital investment strategy work program authorization
99 and project charter to include Lake Sammamish, the Willowmoor project and Issaquah creek to
100 ensure a complete basin-wide approach, subject to approval by the District executive director;

101 B. Work with cities that border Lake Sammamish to design and implement near-term
102 flood mitigation options for lakeside landowners, such as floating docks, out building relocation
103 or elevation and other floodproofing measures;

104 C. Conduct outreach to homeowners' associations and others on the lake to make them
105 aware of their potential eligibility for flood-reduction grants and flood insurance;

106 D. Prepare a high-level assessment of the scope and level of effort needed for data
107 collection and a tributary gaging, groundwater monitoring and weather station network that
108 would be able to support lake level forecasting;

109 E. Continue to pursue the permits needed to continue vegetation maintenance in the
110 Zone; and

111 F. Identify updates to the 2021 work plan and budget needed to undertake the work
112 described in this motion for potential inclusion in the 2021 midyear budget update.

113 SECTION 2. The District executive director will:

114 A. Issue a third-party review request for proposals for analysis of weir alternatives, to
115 remain open until the District executive director executes a contract for the work; and

116 B. Explore possible county-owned locations closer to Lake Sammamish for sandbag
117 distribution.

118 SECTION 3. The District requests King County reach out to city stormwater programs
119 in Bellevue, Issaquah, Sammamish and Redmond through existing contacts and coordination
120 venues to learn more about their current plans, including stormwater retrofits and green
121 stormwater infrastructure initiatives, such as rain gardens, and share its findings to the District
122 executive director.