Exhibit A (Revised)
General Interlocal Agreement
Between the LOTT Clean Water Alliance,
Thurston County and the Cities of Lacey, Olympia, and Tumwater
For Distribution and Use of Reclaimed Water

Reclaimed Water Distribution Methodology

Introduction

LOTT treats a portion of the regional wastewater flow to Class A reclaimed water standards as part of an overall strategy for meeting the wastewater management needs of LOTT's Partner jurisdictions. LOTT operates under the Wastewater Resource Management Plan, which outlines a strategy for building new reclaimed water capacity in increments over time, "just in time" as that capacity is needed. The Class A Reclaimed Water is a resource that is made available to LOTT's Partner jurisdictions (Partners) for reuse.

This Distribution Methodology describes the mechanism by which each of the Partners can be assured a share of the reclaimed water resource. Each of the three Partner cities operates a water utility for supply and distribution of potable water and each has developed utility procedures to allow for the distribution and use of reclaimed water. Although Thurston County currently does not operate a wastewater utility providing water that reaches the LOTT system, this distribution process recognizes that such a relationship could exist in the future. This Methodology is designed to provide the Partners with some assurance of access to current and future increments of reclaimed water to facilitate the planning and investments necessary for distribution and reuse of the resource.

The original Distribution Methodology was finalized in 2005, memorializing reclaimed water allocations to each of the Partner cities that were negotiated in 2004. Those negotiations were based on simplified assumptions concerning the amount of reclaimed water that would be available to the Partners. Much has been learned since then about the operation of LOTT's reclaimed water facilities, reclaimed water demand, and projections of future wastewater capacity needs. This, in turn, resulted in adjustments to LOTT's plans for future reclaimed water facilities.

This update to the Distribution Methodology is intended to document what has changed since the original Methodology was completed and provide a revised set of assumptions regarding current and future available reclaimed water supply. This update also acknowledges that conditions are continually changing, and as such, this Methodology will require review and revision in the future.

Original Reclaimed Water Plans and Negotiations

Four reclaimed water facilities were originally envisioned as part of the Wastewater Resource Management Plan. Increments of treatment capacity were planned over time at 1.0 million gallons per day (MGD) increments. Based on capacity projections at the time, multiple increments of reclaimed water capacity totaling 5.0 MGD were expected to be on-line within the span of just over a decade. Based on those assumptions, negotiations were completed in

2004 to allocate the reclaimed water between the Partners. The following table, which reflects the results of those negotiations, was included in the original 2005 Distribution Methodology. These negotiations were based primarily on the proximity of each facility to the Partners and the objective that allocations to each Partner would ultimately be proportional to the amount of flow each contributed to the wastewater system (by 2050 or full build-out).

Table 1. Negotiated Reclaimed Water Distributions, 2005

Facility	Year On-Line	Volume Produced	LOTT Reserve	Volume Available	Lacey Percent	Lacey MGD	Olympia Percent	Olympia MGD	Tumwater Percent	Tumwater MGD
First Increments:										
Budd Inlet	2004	1.00	0.54	0.46	0.0%	0.00	100.0%	0.46	0.0%	0.00
Martin Way	2007	1.00	0.25	0.75	60.0%	0.45	40.0%	0.30	0.0%	0.00
Tumwater	2014	1.00	0.25	0.75	0.0%	0.00	0.0%	0.00	100.0%	0.75
Chambers Prairie	2016	1.00	0.25	0.75	60.0%	0.45	40.0%	0.30	0.0%	0.00
Increment 1 Subtotals		**4.00**	**1.29**	**2.71**	**33.2%**	**0.90**	**39.1%**	**1.06**	**27.7%**	**0.75**
Second Increments:										
Martin Way	2007	1.00	0.00	1.00	100.0%	1.00	0.0%	0.00	0.0%	0.00
Increment 2 Subtotals		**1.00**	**0.00**	**1.00**	**100.0%**	**1.00**	**0.0%**	**0.00**	**0.0%**	**0.00**
Totals		**5.00**	**1.29**	**3.71**	**51.2%**	**1.90**	**28.6%**	**1.06**	**20.2%**	**0.75**

All volumes are listed in million gallons per day (MGD)

Capacity Planning

LOTT conducts continual planning to assess capacity needs and completes biennial planning cycles to develop both a near-term and long-term Capital Improvements Plan (CIP). Additional reclaimed water production is incorporated into LOTT's CIP to meet future capacity needs. The schedule for design and construction of new increments of reclaimed water production capacity is subject to change based on overall wastewater capacity needs that are influenced by population growth projections, rate of conversions of area septic systems to the sewer system, and regulatory changes, such as changes to LOTT's NPDES discharge permit for the Budd Inlet Treatment Plant. Results of the Reclaimed Water Infiltration Study and the recent update to the state-level Reclaimed Water Rule may also influence future reclaimed water plans, including the level of treatment provided.

Opportunities for multiple community benefits also influence planning for future reclaimed water increments. Wastewater management needs remain the primary driver for the timing, location, and treatment level for future increments. However, benefits to LOTT Partners and the broader community are also taken into account. As stated in the General Interlocal Agreement for Distribution and Use of Reclaimed Water between LOTT and the Partners, the availability of "committed or clearly identified users" in a given area may be considered in decisions about the timing and location of reclaimed water increments. Thus, it is incumbent upon the Partners to provide such information to LOTT in conjunction with LOTT's capacity assessment planning efforts.

Since the original negotiations in 2004, projections of LOTT's future capacity needs have changed dramatically in response to several factors, including updated projections of population growth, more accurate data on per capita wastewater generation rates, revised rates of septic system conversion, and improved treatment performance. By 2016, LOTT had incorporated this new information into its annual capacity assessment. This analysis indicated that LOTT would not need to expand reclaimed water capacity for many years, and then, only in small increments at each of the two existing reclaimed water plants, rather than at the four locations originally envisioned. The 2016 analysis assumed a total of 6 MGD of reclaimed water treatment capacity would be needed by 2050; with 3 MGD of existing capacity and 3 MGD of new capacity. This represents the current understanding of future capacity needs, however, LOTT and the Partners recognize that conditions are continually changing and this projection is also subject to change.

Volumes Available for Reuse

Since 2004, much has also been learned regarding wastewater treatment capacity, reclaimed water production capacity, LOTT's reuse needs, and reuse needs of various end users, all of which differ substantially from original expectations. Negotiations for reclaimed water allocations were based on a simplistic view of treatment capacity increments. These were generalized round numbers that served as the basis of design for the treatment facilities – 1 MGD at the Budd Inlet Reclaimed Water Plant (BIRWP) and 2 MGD at the Martin Way Reclaimed Water Plant (MWRWP).

Once the facilities were in operation, it became apparent that these volumes did not reflect actual production. At the MWRWP, wastewater flows entering the facility fluctuate diurnally based on water use patterns, dipping below the 2 MGD rate at low use times of day. The facility was not designed to equalize fluctuating flows. Together, these factors contribute to daily production volumes less than the 2 MGD originally anticipated. Maintenance activities, such as scheduled clean-in-place cycles, repairs, and upgrades, and operational issues, like process upsets, further reduce the volume of water produced. These types of issues also affect reclaimed water production capacity at the BIRWP, though source flow is not an issue.

The volume of reclaimed water available for reuse by the Partners is also affected by LOTT's reuse needs. The General Interlocal Agreement for Distribution and Use of Reclaimed Water between LOTT and the Partners and Supply Agreements between each of the Partners and LOTT acknowledge that LOTT's uses of reclaimed water take priority over supply of reclaimed water to the Partners. LOTT's uses were estimated at the time of the original negotiations, and LOTT reserve volumes were established for each facility. Operational realities again differ from what was envisioned at the time of negotiations. Once the BIRWP, MWRWP, and the Hawks Prairie Ponds and Recharge Basins were operational, it became apparent that LOTT's reuse needs had been underestimated.

LOTT uses reclaimed water from the BIRWP for decorative and recreational water features at its Regional Services Center and East Bay Public Plaza, along with landscaping irrigation and toilet flushing at both locations and cleaning and process water within the Budd Inlet Treatment Plant. Reclaimed water from the MWRWP is used at the plant and the Martin Way Pump Station for cleaning, process water, and irrigation. It also supports the wetland ponds and

irrigation at the Hawks Prairie site and is used for groundwater recharge at that location. Evaporative losses from the wetland ponds at the Hawks Prairie site are significant and lead to a number of issues when pond levels are low, including loss of wetland plants, accelerated warming of pond water, and associated blooms and die-off of algae and other aquatic vegetation, which in turn causes odor issues and complaints from members of the public who recreate at the site. Excessive plant growth and die-off also contributes to gradual loss of hydraulic capacity as the ponds fill with organic material, which exacerbates the issues. To minimize these issues, LOTT uses reclaimed water to replace evaporative losses and maintain adequate water levels in the wetland ponds.

Actual reclaimed water production volumes and LOTT's reuse needs were not adequately understood until recent years, when the Partner cities' demand for reclaimed water grew and supply limitations became apparent. The term Net Reuse Capacity (NRC) is now used to refer to the volume of reclaimed water from each increment that is actually available for reuse by the Partners. To determine the NRC, LOTT must first identify how much water it expects to produce, operational considerations that may limit production, and the amount LOTT needs to reserve for its own uses. The remaining volume, or NRC, is available for distribution.

Table 2 summarizes the actual production volumes, LOTT's reserve needs, and the resulting NRC for each reclaimed water production facility. The values are provided in ranges because there are many factors that affect each volume. At the MWRWP, actual production volumes vary due to source flow volumes and quality, process upsets, and maintenance activities. LOTT's reuse needs from that facility fluctuate based on process issues like foaming at the MWRWP (reclaimed water is used to counteract, or wash down, the foam) and weather, which drives rates of evaporation from the wetland ponds at the Hawks Prairie site. At the BIRWP, source flow is always available, but the facility is operated based on demand, with production ramping up in the irrigation season when reuse is at its highest. This system includes a one million gallon storage tank, which can supplement peak demands. For this reason, available supply from this facility at times exceeds the NRC. The NRC values listed in this table represent the Parties' best understanding of the volumes of reclaimed water available for reuse by the Partners, however, LOTT and the Partners recognize that conditions are continually changing and NRC values are also subject to change.

Table 2. Reclaimed Water Net Reuse Capacity

	Budd Inlet Reclaimed Water Plant	**Martin Way Reclaimed Water Plant**
Actual Production and Use		
Production	0.55-1.26	1.10-1.63
LOTT Use	0.55-0.77	0.41-0.57
Net Reuse Capacity (NRC)	**0.00-0.71**	**0.53-1.22**
Storage Volume	0.00-1.00	None

All volumes are listed in million gallons per day (MGD)

Supply Agreements and Side Agreements

Supply Agreements have been established between LOTT and each Partner, and these agreements serve multiple purposes. First, they memorialize the allocation of reclaimed water to the Partner from the specific production facility – either the BIRWP or MWRWP. Second, the agreements establish responsibilities of LOTT and the Partners to ensure compliance with LOTT's permit requirements throughout the chain of reclaimed water treatment, distribution, reuse, and/or recharge. Table 3 summarizes the reclaimed water volumes memorialized in Supply Agreements, and in side agreements between the Partners.

Table 3. Supply Agreements as of 2017

	Budd Inlet Reclaimed Water Plant	**Martin Way Reclaimed Water Plant**
Original Expectations and Negotiations		
LOTT Reserve	0.54	0.25
Supply Agreement between LOTT and Lacey	-	1.45
Supply Agreement between LOTT and Olympia	0.46	0.30
Production Volume	1.0	2.0
Adjustment to Address Tumwater Access to Resource		
Side Agreement between Olympia and Tumwater	*0.40*	
Supply Agreement between LOTT and Tumwater	0.50	
Reserved by Olympia from Olympia Supply Agreement	0.06	
Total Committed through Supply Agreements	**0.56**	**1.75**

All volumes are listed in million gallons per day (MGD)

The reclaimed water volumes listed in the Supply Agreements do not, in all cases, reflect accurately the volumes of water currently available to the Partners for reuse. For example, the Supply Agreement between LOTT and Lacey for the MWRWP indicates that LOTT "shall make available up to 1,450,000 gallons per day" to the City, but that full volume of water, while allocated to Lacey through past negotiations, is more than the NRC and will not likely be available to Lacey until the MWRWP is expanded to treat an additional increment of water. In that sense, the volumes memorialized in the Supply Agreements recognize allocations that may not be fully realized until some point in the future.

Original negotiations were based on assumptions that access to reclaimed water would be dependent on the Partners' proximity to each production facility. Lacey and Olympia were assumed to have access to reclaimed water from the MWRWP and Olympia was assumed to have sole access to reclaimed water from the BIRWP. It was assumed that Tumwater would not have access to reclaimed water until a future satellite facility was constructed in the Tumwater area. For that reason, Olympia was allocated the full 0.46 MGD expected to be available from

the BIRWP. In 2012, however, a reclaimed water conveyance line was constructed from the BIRWP to Tumwater, opening up the possibility of irrigating the Tumwater Municipal Golf Course with reclaimed water. Because Olympia did not have uses established for their full allocation, a side agreement was negotiated between Olympia and Tumwater to allow Tumwater to access up to 400,000 gallons per day of Olympia's allocation from the Budd Inlet Reclaimed Water Plant. This side agreement then formed the basis for a Supply Agreement between LOTT and Tumwater, stating that Tumwater could receive up to 0.50 MGD (0.40 MGD of Olympia's allocation and 0.10 MGD of uncommitted, yet available, reclaimed water supply). This arrangement has been sufficient to meet Tumwater's current reuse need, but due to the temporary nature of the side agreement, it does not afford Tumwater the same level of assurance as exists for the other Partners.

Discrepancies in Distribution Volumes

Table 4 provides an overview of existing reuse by each of the Partners. These values were derived from 2016 reuse data. They were then refined to account for potential recharge rates at the cities' Woodland Creek Groundwater Recharge Facility. Actual reuse volumes vary year to year due to weather, groundwater levels, and other factors.

Table 4. Reclaimed Water Use as of 2017

	Budd Inlet Reclaimed Water Plant	**Martin Way Reclaimed Water Plant**
Existing Partner Uses		
Lacey – Woodland Creek Recharge Facility		0.25-0.75
Olympia – Woodland Creek Recharge Facility		0.05-0.15
Olympia – Department Enterprise Services	0.03	
Olympia – Port of Olympia	0.03	
Olympia – City of Olympia	0.01	
Tumwater – Golf Course	0.40-0.60	
Total of Partner Uses	**0.47-0.67**	**0.30-0.90**

All volumes are listed in million gallons per day (MGD)

In comparing negotiated allocations, volumes memorialized in Supply Agreements, existing Partner reuse, and NRC, it becomes clear there are discrepancies in some of these values. Those discrepancies are summarized in Table 5.

For the MWRWP, the resource appears to be over-allocated by 0.53 MGD when comparing both the negotiated allocations and Supply Agreement volumes to the maximum NRC. This discrepancy was due to a combination of factors, most notably that production volume was originally overestimated, and LOTT's reserve volume was underestimated. When compared to existing reuse data, however, the available supply, or NRC, is sufficient to meet the current reuse needs of the Partners.

For the BIRWP, NRC exceeds the current reuse needs of the Partners. It also exceeds both the negotiated allocations and the Supply Agreement volumes. The end result is that there is an uncommitted volume of 0.25 MGD from the BIRWP available to allocate through negotiation.

Table 5. Discrepancies Based on Actual Supply and Demand

	Budd Inlet Reclaimed Water Plant	Martin Way Reclaimed Water Plant
Discrepancies		
Maximum Net Reuse Capacity vs. Supply Agreements	+0.15	-0.53
Maximum Net Reuse Capacity vs. Negotiated Allocations	+0.25	-0.53
Maximum Net Reuse Capacity vs. Actual Use	+0.04	0.32

All volumes are listed in million gallons per day (MGD)

Long-Term Reclaimed Water Planning

In 2010, the City of Lacey identified in the "City of Lacey Comprehensive Water Right Mitigation Plan" and the City of Olympia identified in the "City of Olympia and Nisqually Indian Tribe, McAllister Wellfield Mitigation Plan" the reclaimed water quantities needed for all phases of water rights mitigation. Although the quantity of reclaimed water currently (2018) available to Lacey and Olympia from the MWRWP is adequate to meet each of the Cities' current mitigation requirement, it will not be adequate for the third phase of water rights mitigation. Thus, Lacey and Olympia have an interest in gaining access within the next decade to their maximum allocation as listed in the Supply Agreement (up to 1.75 MGD from the MWRWP). Similarly, the City of Tumwater is developing a water right mitigation plan that will be dependent in part on access to more reclaimed water. The Cities' mitigation need is one example of a clearly identified use that may be considered in decisions about the timing and means of developing additional reclaimed water supply. However, it may be a situation in which a Partner's need for reclaimed water as a resource is more urgent than LOTT's overall system capacity needs. In that case, creative approaches may need to be considered, including the possibility that the Partner might fund, in whole or in part, expansion of reclaimed water production capacity or optimization of an existing facility.

LOTT is conducting a master planning effort beginning in 2018. It involves two phases, the second of which will be an update of the long-range plan for overall wastewater system capacity, focusing on expansion of reclaimed water production, conveyance, and disposition. This work will provide opportunity to consider the Cities of Lacey and Olympia's need for additional reclaimed water, as well as needs of the other Partners, within the context of an overall system strategy. Some of the options to be evaluated as part of this effort include construction of flow equalization at the MWRWP, construction of the 3rd increment at the MWRWP, conveyance of source flow from the Budd Inlet Plant to the MWRWP, and more. The planning effort is expected to be complete in 2020.

Updates to Reclaimed Water Allocations

This update to the Distribution Methodology does not involve a re-negotiation of previously allocated reclaimed water volumes from the BIRWP or the MWRWP. However, it does adjust assumptions regarding future reclaimed water production facilities, acknowledging that there

are likely to be only the two existing reclaimed water production facilities for the foreseeable future, rather than the four facilities originally envisioned.

This update also includes the results of negotiation for the uncommitted volume of reclaimed water from the BIRWP (0.25 MGD). Tumwater has committed, clearly identified, established uses for reclaimed water, but lacks a formal allocation. During 2018 negotiations, Lacey and Olympia acknowledged that they did not have need of the uncommitted volume and all agreed that Tumwater will receive that allocation. This provides Tumwater with more permanent access to a portion of their existing reuse needs, though continuation of the side agreement with Olympia is necessary to fulfill the remainder of their existing reuse need.

Table 6 summarizes the updated allocations and replaces the distribution table completed in 2005 (Table 1). Table 6 reflects the original reclaimed water allocations for both Lacey and Olympia from both reclaimed water production facilities and the new allocation from the BIRWP for Tumwater.

Table 6. Negotiated Reclaimed Water Allocations, 2018

Facility	Year On-Line	Lacey MGD	Olympia MGD	Tumwater MGD
Budd Inlet Reclaimed Water Plant	2004	0.00	0.46	0.25
Martin Way Reclaimed Water Plant	2006	1.45	0.30	0.00
Totals		**1.45**	**0.76**	**0.25**

All volumes are listed in million gallons per day (MGD)

Future Updates to the Distribution Methodology

The Distribution Methodology must be updated in the future to reflect changes in reclaimed water facility planning and other factors. LOTT and the Partners are responsible for updating the document, which may include negotiating distributions of future reclaimed water increments. The Partners recognize that this initial update was overdue, and that future updates should be completed in a timely manner to ensure the document remains relevant and reflective of actual conditions. The Partners agree to begin the next update of the Distribution Methodology when one or more of the following conditions apply:

- LOTT determines a course of action for responses to completion of the Budd Inlet/Capitol Lake Total Maximum Daily Load (TMDL) study that involves additional reclaimed water production capacity;
- LOTT moves the next increment of reclaimed water production capacity into the project design phase or additional reclaimed water becomes available through other means, such as operational adjustments;
- Partner or LOTT demand for reclaimed water changes substantially in response to some specific condition;
- Any one Partner demonstrates to the LOTT Board of Directors a need for an update.

If none of these conditions apply by 2025, the Partners agree to consider completing an update to the Distribution Methodology document at that time. The Partners may choose, however, to

further postpone the update if at that time, there is still much uncertainty in plans for future reclaimed water increments.

The Partners also agree to negotiate future allocations in good faith, and to consider multiple objectives in their negotiations. Those objectives, and their relative priority, may change over time in step with changing conditions. They include:

- Reconcile the discrepancies between current Supply Agreement volumes and available supply.
    - For the Martin Way Reclaimed Water Plant, this may involve allocating the next available increments to resolve shortfalls for Lacey and Olympia.
    - For the Budd Inlet Reclaimed Water Plant, this may involve allocating the next available increment to Tumwater to eliminate the need for the side agreement between Olympia and Tumwater.
- Address anticipated demand for reclaimed water, allocating resource to the Partners based on definitive or highly likely end uses.
- Consider the issue of equitable access to the resource, using the fallback distribution proportions described below as a gauge for assessing proportional distribution.

It is possible that one or more of these objectives may conflict with the others, or with LOTT's wastewater management needs. For example, a new large-scale irrigation end use could play a role in meeting regulatory requirements to reduce discharge to Budd Inlet. However, that new end use may not be located within the service area of the Partner that is "due" an allocation to meet the objective of equitable access to the resource. LOTT's capacity needs must be factored into future negotiations and may ultimately supersede other negotiation objectives.

Fallback Distribution Proportions

The LOTT Partners recognize that equitable access to the reclaimed water resource is of interest to each jurisdiction. For that reason, this methodology establishes distribution proportions based on each Partner's long-term projected contribution to the LOTT system. These percentages can be used to help inform future negotiations and, if necessary, as a "fallback" proportion for distribution of added increments of capacity in the event that distribution negotiations between the Partners are not successful.

TRPC population and employment projections are used to estimate each Partner's long-term projected contribution to the LOTT system. The percentage allotments are based on TRPC's 2050 population and employment forecasts converted into equivalent residential units (ERUs) for LOTT planning purposes. This approach is consistent with other long-range water and sewer planning data used by LOTT and the LOTT Partners.

Based on the 2050 planning forecasts available in 2017, the corresponding reclaimed water distribution for each of the LOTT Partners is:

Lacey	39.6%
Olympia	42.7%
Tumwater	17.7%
Thurston County	0.0%

The Parties recognize that the TRPC population and employment forecasts and related wastewater flow projections are planning estimates only and will change over time. For that reason, the fallback percentages may be revisited and, if necessary, readjusted prior to future negotiations and other updates to the Distribution Methodology. Such adjustments will not affect distribution agreements already in effect.

Agreements and Approvals

The negotiated (or fallback) distribution volumes will serve as the basis for future Supply Agreements between LOTT and each of the Partners as additional reclaimed water capacity is developed and reclaimed water not addressed through existing Supply Agreements becomes available for use.

Interim Uses

Because planning, funding limitations, and/or infrastructure requirements may delay a Partner's ability to put some or all of its allocated reclaimed water to use, the Partners reserve the right to allow some or all of their share of water to be temporarily used by another Partner(s) until it is actually needed. Such interim use may be negotiated among the affected Partners. Such an agreement is currently in place between Olympia and Tumwater.

Renegotiation Opportunities

The Parties recognize that needs and circumstances may change as they gain continued experience with distribution and use of reclaimed water. Accordingly, flexibility to adjust distributions is needed. Renegotiations of the reclaimed water distributions for any increment can occur at any time if all of the participating Partners agree.

The Partners also recognize that LOTT's long-range capacity needs are subject to change. It is possible that LOTT may need to produce substantially more reclaimed water than the increments currently planned or that LOTT may produce a higher quality of water than Class A. Negotiations for new or different increments can occur at any time if all of the participating Partners agree.

Flexibility in adjusting to realities of reclaimed water distribution may also result in desires to exchange other benefits as substitutes for reclaimed water. Accordingly, the Parties agree that they may exchange alternative benefits, including but not limited to financial benefits or substitute water supplies, in place of reclaimed water distributions. Alternative benefits may be considered as distributions are negotiated or renegotiated.