TWENTY-FIRST SUPPLEMENT TO PERSONAL SERVICES AGREEMENT BETWEEN LEWIS COUNTY, ACTING AS THE FISCAL AGENT FOR THE CHEHALIS RIVER BASIN FLOOD AUTHORITY AND WEST CONSULTANTS, INC.

THIS TWENTY-FIRST SUPPLEMENT to PERSONAL SERVICES AGREEMENT (TWENTY-FIRST SUPPLEMENTAL AGREEMENT) is made and entered into by and between LEWIS COUNTY, WASHINGTON, herein referred to as "County", acting as the fiscal agent for the Chehalis River Basin Flood Authority ("Flood Authority"), and WEST Consultants, Inc., 12509 Bel-Red Road, Suite 100, Bellevue, WA 98005 herein referred to as "Contractor", together referred to as "Parties."

IT IS THE PURPOSE OF THIS AGREEMENT to amend the Parties' Agreement for consulting and coordination services for designing, implementing and maintaining an Early Flood Warning System, including a gage/sensor network study, installation, testing and calibration of river, precipitation, temperature, wind gages, webcams, etc., as executed on October 19, 2009, and subsequently amended through Supplemental Agreements (hereinafter referred to as the "Existing Agreement").

CONTRACTOR acknowledges and by signing agrees to the amendments to the Existing Agreement set forth in this Supplemental Agreement, agrees that they have been mutually negotiated and, further, agrees that all of the terms of the Existing Agreement not amended or modified by this Supplemental Agreement are and shall remain in full effect.

THEREFORE, IT IS MUTUALLY AGREED THAT this Twenty-first Supplemental Agreement amends the Existing Agreement as set forth below:

Section 1. Statement of Work

CONTRACTOR shall furnish the necessary personnel, equipment, material and/or services and otherwise do all things necessary for, or incidental to, the performance of the work set forth in the Twenty-first Supplemental Scope of Work, attached hereto as Attachment "A" and fully incorporated into the Existing Agreement.

Section 2. Period of Performance

Subject to its other provisions, the period of performance of this Agreement shall commence on the date of signing by both Parties and be completed as agreed and shown in the attached Twenty-first Supplemental Scope of Work, Attachment "A," but may be modified or extended by mutual agreement in accordance with the amendment provisions of the Existing Agreement.

Section 3. Payment

Compensation for the work provided in accordance with this Twenty-first Supplemental Agreement shall be as set forth in Attachments "A" (Supplemental Scope of Work) and "B" (Supplemental Compensation). Compensation for this Twenty-first Supplemental Agreement shall not exceed one hundred and six thousand, five hundred twenty-five dollars and forty cents (\$184,086.40) without written prior approval of the COUNTY and authorization by the Flood Authority. Compensation for this Twenty-first Supplemental Agreement is increased over the Twentieth Supplemental Agreement by seventy-seven thousand, five hundred sixty-one dollars

(\$77,561.00) for purposes of 2021 Annual O & M Costs as authorized by the Flood Authority at their November 19, 2020 meeting as presented in the Flood Authority staff memo.

Section 4. Future Non-Allocation of Funds

If sufficient funds are not appropriated or allocated for payment under this contract for any future fiscal period, the County, acting as the lead fiscal agent for the Flood Authority, will not be obligated to make payments for services or expenses incurred after December 31, 2020. No penalty or expense shall accrue to the County in the event this provision applies.

This Twenty-first Supplemental Agreement and statement of work, period of performance and compensation constitutes a supplement to the Parties' Existing Agreement and supplements and amends the scope of work, period of performance and compensation, with such additional provisions agreed upon by the parties for good and sufficient consideration, the receipt of which is hereby acknowledged.

is hereby acknowledged.	, , , , , , , , , , , , , , , , , , ,
IN WITNESS WHEREOF, the parties have executed this day of January 2021.	d this Twenty-first Supplemental Agreement
Lewis County Contract Manager Lee Napier, Director of Community Development 2025 NE Kresky Ave. Chehalis, WA 98532 360/740-2606	Contractor Program Manager Henry Hu, Ph.D., P.E., P.H., CFM, D.WRE WEST Consultants, Inc. 12509 Bel-Red Road, Suite 100 Bellevue, WA 98005 425/646-8806
LEWIS COUNTY	WEST CONSULTANTS, INC.
By: Lee Napier Title: Director of Community Development	By: Henry Hu Title: Vice President, WEST Consultants, Inc
Date:	Date:

ATTACHMENT "A" TWENTY-FIRST SUPPLEMENTAL SCOPE OF WORK

TWENTY-FIRST SUPPLEMENTAL PERSONAL SERVICES AGREEMENT Between LEWIS COUNTY And WEST Consultants, Inc.

Performance Period Ending December 31, 2021

Who: David Curtis, Jeffery Budnick and staff.

Time and Expense: \$184,086.40

Period of Performance: January 1, 2020 through December 31, 2021.

Tasks: Tasks for the period of performance under this Twenty-first Supplemental Agreement shall be as follows:

- 1. **Routine Gage Maintenance** (approximately three times per year per site with unscheduled trips for unforeseen circumstances):
 - a. Access shelter and retrieve live readings from data logger: total rain accumulation; air temperature; stage; and battery.
 - b. Obtain a live air temperature reading using a calibrated thermometer placed close to the fixed air temperature probe at the site. Compare stage readings to reference gage.
 - c. Visually inspect rain gage bucket and funnel for debris.
 - Remove rain gage bucket and rinse with water. Let water drain through bucket and funnel to remove any possible debris broken free from the rinse or unable to be seen. Tap water or store-bought water will be used.
 - Check level bubble on base of rain gage.
 - Removal of bucket may involve the use of a step ladder if height of rain gage is above the reach of the personnel. (10' step ladder would be best for some sites)
 - d. If weather permits, perform a tip-test on the system.
 - Retrieve a live reading from the data logger.
 - Manual tip collection buckets a known amount of times.
 - Retrieve a live reading from the data logger to confirm number of tips.
 - Reset data logger to original rain accumulation number before tip test was executed.
 - e. Reinstall rain gage bucket and check for loose equipment (solar panels and antenna) and wire connections. Check inside shelter wire connections.
 - f. Retrieve live readings from data logger: total rain accumulation; air temperature and battery; and retrieve one last live air temperature reading with thermometer.

- g. Download data from data logger, check data for accuracy and fill out site inspection form at site.
- h. Retrieve one last set of live readings to confirm data logger is working properly.
- i. Close shelter, attach lock, and store ladder for transport.

Prior to each rainy season, the calibration of each rain gage will be checked with a Hydrological Services Field Calibration Device.

- 2. **Operational Support**: Provide on-going support for website monitoring and updates for both routine operations and during potential flood events, including damage to gage systems, evenly spread during the period of performance.
- 3. **Parts Inventory**: Ensure sufficient parts inventory for period of performance.
- 4. **Webcam Cell Fees:** Fee for three cell data plans for three webcams.
- 5. Webcam Subscription Fees: Fee for three webcam subscriptions with OneRain (Contrail).
- 6. **Website**: Secure Contrail annual subscription (260 total sensors or more in and near Chehalis River Basin), paid once agreement is commenced.
- 7. **Gage Relocation:** Relocate the following six gages by June 30, 2021 (as approved by the Flood Authority at their May 21, 2020 meeting and further described here: Brooklyn; Haywire; Rock; Skookumchuck; Chehalis Blw Thrash Creek; and Newaukum
 - a. Coordinate relocation of gages to a suitable site that is in the best interests of primary data users (Flood Authority, NWS).
 - b. Conduct a field visit to potential new locations prior to installation. (Sites with the potential for longest service will be prioritized.)
 - c. Coordinate with property owners and Flood Authority to secure access and permits to install and maintain gages.
 - d. If timberland is a desired relocation site, a plot of land will be picked that has recently (within 1-2 years) been harvested to provide maximum time between relocation efforts.
 - e. Remove precipitation gage components at existing sites, including cutting off mounting posts at or below ground level and removing any sharp objects.
 - f. Reinstall precipitation components at new locations, reusing as many existing components as possible.
 - g. Work with NWS to update the Hydrometeorological Automated Data System (HADS) for the relocated sites.
 - h. Update Flood Authority website as needed to add/remove gage locations.

ATTACHMENT "B" TWENTY-FIRST SUPPLEMENTAL COMPENSATION

TWENTY-FIRST SUPPLEMENTAL PERSONAL SERVICES AGREEMENT Between LEWIS COUNTY And WEST Consultants, Inc.

Performance Period Ending December 31, 2021

Reimbursement for services consistent with the Twenty-first Supplemental Scope of Work (Attachment "A") and Section 3, Payment, shall be as follows:

Operation and Maintenance:	Cost:	Details:
 Routine Gage Maintenance (12 gages, including 4 stream gages). 	\$99,422.00	Provide routine gage maintenance evenly spread during period of performance.
2. Operational Support.	\$24,300.00	Provide on-going support for website monitoring and updates for both routine operations and during potential flood events, evenly spread during the period of performance.
3. Parts Inventory.	\$5,000.00	Ensure sufficient parts inventory for period of performance.
4. Webcam Cell Fees	\$3,000.00	Fee for three cell data plans for three webcams.
5. Webcam Subscription Fees	\$2,520.00	Fee for three webcam subscriptions with OneRain (Contrail).
6. Website.	\$12,500.00	Secure OneRain (Contrail) annual subscription (260 total sensors or more in and near Chehalis River Basin), paid once agreement is commenced.
7. Gage Relocation	37,344.40	Relocate the following six gages by November 2020: Brooklyn; Haywire; Rock; Skookumchuck; Chehalis Blw Thrash Creek; and Newaukum.

TOTAL \$184,086.40

Note: Item 7 ("Gage Relocation") shall be invoiced separately and received by Lewis County prior to June 30, 2021.