# Interagency Agreement Between Milwaukee County Parks and University of Wisconsin-Milwaukee

This Interagency Agreement (Agreement) is entered into on \_\_\_\_\_\_\_ between the Board of Regents of the University of Wisconsin System on behalf of the University of Wisconsin-Milwaukee (University), a public educational institution of the State of Wisconsin (the "University"), and Milwaukee County Parks (the "County"). Referenced together, the County and the University are the parties (the "Parties") to this Agreement.

#### WITNESSTH

**WHEREAS**, County as landowner applied for and received a grant through the Wisconsin Coastal Management Program (Agreement No. AD209127-021.10); and

**WHEREAS**, the focus of this project is continued data collection in the first year of a planned multi-year collaborative project to provide insights into nutrient dynamics and cycling pathways and the development of eutrophication in Veterans Park Lagoon; and

**WHEREAS**, the work being done through the grant is a collaboration between the County, City of Milwaukee, and UWM; and

**WHEREAS**, as part of the grant application it was determined that the University would be responsible for data collection and it is necessary to have an agreement between the County and University to carry out the grant work by the University; and

**WHEREAS**, the Milwaukee County Board of Supervisors by virtue of adopting Resolution 20-419 on June 25, 2020, authorized Milwaukee County Parks to accept the award funding from the Wisconsin Coastal Management Program and the Fund for Lake Michigan and authorized the Comptroller, Department of Administrative Services, and Milwaukee County Parks to execute administrative fund transfers to implement the awarded grant funding;

**NOW THEREFORE**, the Parties do herewith, in consideration of mutual promises and other good and valuable consideration, agree as follows:

#### 1. Scope of Work

The County desires to have the University undertake the scope of work as outlined in Exhibit A for water quality monitoring of Veterans Park Lagoon. The University agrees to use reasonable effort to perform the work. The County acknowledges that the University makes no expressed or implied warranties for results of the work.

#### 2. Period of Performance

The term of this Agreement shall be from the date that both parties execute this Agreement through July 1, 2023, or as extended due to delays in project initiation, or completion of work described in Exhibit A, or until such time as either party notifies the other of its termination, as provided herein.

#### 3. Project Costs

The University shall be paid by the County for all costs incurred in connection with the work up to the amount of \$129,523 (U.S. Dollars) as detailed in Exhibit A.

# 4. Payment Schedule

This is a fixed-price agreement. Upon execution of this Agreement, the University will submit an invoice for full payment due within thirty (30) days from receipt of the invoice in accordance with the following schedule:

\$129,523 is due upon execution of the agreement \$\_\$129,523 \_\_\_\_\_ is due \_\_\_\_30 days after execution of this agreement

Invoices shall be submitted to:

Parks Accounting

9480 Watertown Plank Road Wauwatosa, WI 53226 (414)257-8081

Checks shall be made payable to the Board of Regents of The University of Wisconsin System (ID#39-6006492) and sent to:

Name: University of Wisconsin-Milwaukee, Bursar's Office

Address: P.O. Box 500, Milwaukee, WI 53201-0500

#### 5. Termination

Performance under this Agreement may be terminated by either party upon sixty (60) days written notice to the other.

In the event of termination, the County will only be liable for services rendered through the date of termination and not for the uncompleted portion, or for any materials or services purchased or paid for by the University for use in completing the Agreement, including non-cancellable commitments..

In the event a party breaches or defaults in any of the terms or conditions of this Agreement, the other party can provide the breaching or defaulting party with written notice that the breaching or defaulting party has thirty (30) days to remedy the breach or default. If the party fails to remedy such breach or default, the party giving notice may, at its option and in addition to any

other remedies which it may have at law or in equity, terminate this Agreement by sending notice of termination in writing to the other party, and such termination shall be effective as of the date of the receipt of such notice.

Either party further reserves the right to terminate the Agreement at any time for any reason by giving the other party sixty (60) days written notice of such termination. In the event of said termination, the University shall stop activities hereunder as mutually agreed to, upon receipt of said notice, and turn over copies of all deliverables to the County. Upon said termination, the University shall be paid for all services rendered through the date of termination, including non-cancellable commitments.

#### 6. Publicity

The parties will mutually agree on any press releases or other publicity relating to the Research Project.

#### 7. Reports

The University shall furnish to the County reports if required by the Scope of Work or to fulfill grant requirements during the term of this Agreement summarizing the work being conducted. A final report setting forth the accomplishments and significant work findings shall be prepared by the University and submitted to the County within ninety (90) days after the expiration of this Agreement.

#### 8. Proprietary Data

The parties will exercise reasonable effort to maintain in confidence proprietary information disclosed or submitted to the other party that is designated in writing as confidential information at the time of disclosure (Confidential Information). Confidential Information does not include information which:

- is available in the public domain or becomes available to the public through no act of the receiving party; or
- is independently known prior to receipt thereof or is discovered independently by an employee of the receiving party who had no access to the information supplied by the disclosing party under this Agreement; or
- is made available to the receiving party as a matter of lawful right by a third party; or
- is required to be disclosed by applicable law.

The University retains the right to refuse to accept Confidential Information that is not considered to be essential to the completion of the Research Project. The obligations under this paragraph shall survive and continue for one (1) year after this Agreement ends.

#### 9. Liability

The University agrees to hold harmless the County, its officers, agents, and employees from any and all liability, including claims, demands, losses, costs, damages and expenses of every kind and description (including death), or damages to persons and or property arising out of or in

connection with or occurring during the course of this Agreement where such liability is founded upon and grows out of any wrongful, intentional or negligent acts of omissions of any officer, employee or agent of the Unviersity while acting within the scope of their employment where protection is afforded under Wisconsin Statutes 893.82 and 895.46(1).

#### 10. Equipment

Title to any equipment or supplies purchased or manufactured in the performance of the work funded under this Agreement vests in the University upon acquisition.

# 11. Assignment

Neither party may assign this Agreement to another without the prior written consent of the other party.

# 12. Independent Inquiry

Nothing in this Agreement shall be construed to limit the freedom of researchers who are participants in this Agreement, whether paid under this Agreement or not, from engaging in similar research inquiries made independently under other grants, contracts or agreements with parties other than the County.

# 13. Independent Contractor

In the performances of all services under this Agreement:

- each party and its personnel shall be deemed to be and shall be an independent contractor and, as such, shall not be entitled to any benefits applicable to employees of the other party; and
- neither party is authorized or empowered to act as agent for the other for any purpose and shall not on behalf of the other enter into any contract, warranty, or representation as to any matter. Neither party shall be bound by the acts or conduct of the other.
- nothing contained in this Agreement shall constitute or be construed to create a
  partnership or joint venture between the County or its successors or assigns and the
  University or its successors or assigns.
- in entering into this Agreement, and in acting in compliance herewith, the University is at all times acting and performing as an independent contractor, duly authorized to perform the acts required of it hereunder.

# 14. AFFIRMATIVE ACTION

The University assures that it will undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to insure that no person shall on the grounds of race, creed, color, national origin, or sex be excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. The University assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this subpart. The University assures that it will require that its covered suborganizations provide assurances to the University that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations, as required by 14 CFR Part 152, Subpart E, to the same effect.

#### 15. Prohibited Practices

- the University during the period of this contract shall not hire, retain or utilize for compensation any member, officer, or employee of County or any person who, to the best knowledge of the University, has a conflict of interest under this agreement.
- the University hereby attests that it is familiar with Milwaukee County's Code of Ethics
  which states, in part, "No person may offer to give to any County officer or employee or
  his immediate family, and no County officer or employee or his immediate family, may
  solicit or receive anything of value pursuant to an understanding that such officer's or
  employee's vote, official actions or judgment whould be influenced thereby."

#### 16. Insurance

At all times during the term of this Agreement, the University shall maintain liability coverage through the State of Wisconsin's self-funded property and liability program pursuant to Wisconsin Statute §893.82 and §895.46(1) . A certificate of coverage will be provided to County upon request.

# 17. County Rights of Access and Audit.

The Contractor, Lessee, or other party to the contract, its officers, directors, agents, partners and employees shall allow the County Audit Services Division and department contract administrators (collectively referred to as Designated Personnel) and any other party the Designated Personnel may name, with notice, to audit, examine and make copies of any and all records of the Contractor, Lessee, or other party to the contract, related to the terms and performance of the Contract for a period of up to three years following the date of last payment, the end date of this contract, or activity under this contract, whichever is later. Any subcontractors or other parties performing work on this Contract will be bound by the same terms and responsibilities as the Contractor. All subcontracts or other agreements for work performed on this Contract will include written notice that the subcontractors or other parties understand and will comply with the terms and responsibilities. The Contractor, Lessee, or other party to the contract, and any subcontractors understand and will abide by the requirements of Chapter 34 of the Milwaukee County Code of General Ordinances. Any and all County contracts and solicitations for contracts shall include a statement that the Contractor, lessee, or other party to the contract, and any subcontractors understand and will abide by the requirements of Chapter 34 of the Milwaukee County Code of General Ordinances.

#### 18. Notices

Notices and communications are deemed made if sent to the party to receive such notice or communication at the address given below, or such other addresses as may be designated by notice in writing.

To the University:
University of Wisconsin – Milwaukee
Attn.:
Kate Mollen

Interim Director, Office of Sponsored Programs Mitchell Hall 273 3203 North Downer Avenue Milwaukee, Wisconsin 53211

Telephone: (414) 229-4853 Facsimile: (414) 229-5000

E-mail: or-osp-contracts@uwm.edu

To County:

Milwaukee County Parks Attn.: Guy D. Smith

9480 W. Watertown Plank Rd.

Wauwatosa, WI 53226

Either party may designate a new address for purposes of this Contract by written notice to the other party.

#### 19. Governing Law

This Agreement shall be governed by the laws of the State of Wisconsin.

#### 20. Counterparts and Facsimile

This Agreement may be executed in any number of counterparts, each of which is deemed to be an original, but which together shall constitute but one instrument. This Agreement shall be considered accepted once it has been executed by both parties. A signature delivered by facsimile or electronic means will be considered binding for each party.

#### 21. Entire Agreement

This Agreement embodies the entire understanding between the University and the County for this Research Project, and any prior or contemporaneous representations, either oral or written, are superseded. No amendments or changes to this Agreement, including without limitation, changes in the statement of work, total estimated cost, and period of performance, shall be effective unless made in writing and signed by authorized representatives of the parties.

#### SIGNATURE PAGE FOLLOWS

This Page Reserved for Electronic Signatures

**EXHIBIT** A

Attached

#### **EXHIBIT A**

# Scope of Work and Budget for Water Quality Monitoring of Veterans Park Lagoon, Wisconsin Coastal Management Program

We will continue to monitor aspects of aquatic ecology and chemistry in Veteran's Park Lagoon related to the severity of toxic harmful algal blooms, eutrophication, and sewer-shed input. This monitoring will occur at various times throughout the grant period (see below). Data will be used in the feasibility study to determine restoration efforts needed to improve water quality and recreational safety in this coastal environment. Data will be gathered in four areas including A) algal abundance; B) cyanobacterial toxin diversity and concentration; C) sewage indicators including bacteria, pharmaceuticals, and personal care products; and D) biogeochemistry including phosphorus, nitrogen, and carbon speciation.

## Sampling and Continuous Monitoring

Surface and bottom water sampling will occur at four sites along a north-south transect weekly during the open water season from May through October. Samples will also be taken monthly November through April from the shoreline to gauge winter inputs and Spring nutrient loading. In total we expect to gather approximately 200 water samples each year. During each sampling event depth profiles of water temperature, dissolved oxygen, pH, turbidity, total suspended solids, and conductivity will be measured using a data sonde. In addition, a mini water quality monitoring buoy will be deployed providing continuous minute-by-minute measures of water temperature by depth, photosynthetic active radiation, air temperature and humidity, wind speed, and direction.

Storm water at storm water pipes feeding into the lagoon from the west side of Lincoln Memorial Drive will be sampled monthly May through October and after major



Figure. Continuous monitoring data buoy in Veterans Park Lagoon.

storm events. All water samples will be analyzed at the University of Wisconsin – Milwaukee School of Freshwater Sciences and Joseph J. Zilber School of Public Health.

#### Algal Abundance

Total algal abundance will be assessed using chlorophyll-a while the abundance of cyanobacteria will be assessed using C-phycocyanin, both measured by spectrophotometric methods. The ratio of these two pigments will indicate cyanobacterial dominance, a metric that will be used to assess improvements in water quality.

To quantify the abundance of toxic cyanobacteria we will filter lagoon water onto 0.22 um filters to collect the microorganisms present and store the filters at -80 C prior to further processing.

From each filter we will extract and purify the collected DNA and then use quantitative PCR (qPCR) to quantify the abundance of three common toxic cyanobacterial species, *Microcystis* spp., *Anabaena* spp., and *Planktothrix* spp. by targeting their 16S rRNA gene. These data will allow us to quantify and compare the abundances of each Cyanobacteria seasonally in the lagoon. In addition, we will use qPCR to quantify microcystin toxin-encoding genes in the lagoon and relate these concentrations to the total Cyanobacteria abundances and toxin measured to identify time periods and/or locations with high concentrations of potentially toxin-producing organisms.

## Cyanobacterial Toxin Diversity and Concentration

Cyanobacterial toxins are of primary concern in the lagoon for ecological and human health. A suite of two dozen cyanobacterial toxins will be quantified using a combination of liquid chromatography with tandem mass spectrometry, immuno-, and bio-assays. These methods target toxins previously detected in the lagoon (i.e. microcystins) as well as other more commonly occurring cyanobacterial toxins in north temperate lakes that may occur sporadically in the lagoon. The United States Environmental Protection Agency published recreational guideline values for the cyanobacterial toxins microcystin and cylindrospermopsin of 8 and 15  $\mu g/L$ . Microcystins are the most abundant toxins detected so far in the lagoon. The percentage of samples with microcystin exceedances above 8  $\mu g/L$  will be a metric for assessing the recreational safety and improvements in water quality in the lagoon.

#### **Sewage Indicators**

To determine if sewage leakage in addition to storm water is a significant source of water flow into the lagoon a suite of 75 sewage indicator chemicals will be measured in storm water drains using liquid chromatography with tandem mass spectrometry. These chemicals fall into six classes including common pharmaceuticals (antibiotics, diabetic drugs, cholesterol- lowering drugs, etc), personal care products (triclosan, triclocarban), and caffeine among other moodaltering drugs that commonly occur in raw sewage. As an indicator for pathogens associated with waste water *E. coli* will also be measured in storm water drains using the Colilert-18 assay. In addition, we will use two human fecal specific and one sewage specific qPCR assay to quantify any connection between sewage and the lagoon and assess the potential for human health risks associated with recreation.

#### **Biogeochemistry**

We will continue the sampling and analyses of phosphorus (P) species, including phosphate or dissolved inorganic phosphorus (DIP), dissolved organic phosphorus (DOP), and particulate organic/inorganic phosphorus (POP and PIP), nitrogen species including nitrate (NO<sub>3</sub>), nitrite (NO<sub>2</sub>), ammonium (NH<sub>4</sub>), and particulate nitrogen (PN), chlorophyll-a, and alkaline phosphatase (AP), as well as organic carbon species including dissolved organic carbon (DOC), chromophoric dissolved organic matter (CDOM), and particulate organic carbon (POC). These data will provide insights into nutrient dynamics and cycling pathways and the development of eutrophication in Veterans Park Lagoon, and thus provide a scientific basis for restoration of the aquatic environment, nutrient remediation and/or algal bloom control in the study area.

Our COVID19 safety plan for this project is attached.

# **Budget**

#### Personnel

Todd Miller, Associate Professor, Zilber School of Public Health. No salary requested

Laodong Guo, Associate Professor, School of Freshwater Sciences. No salary requested

Ryan Newton, Assistant Professor, School of Freshwater Sciences. No salary requested

Jeffrey Nuese, Research Technician, Zilber School of Public Health (Miller Lab). 50% at \$20,600 plus \$3,935 in fringe. Mr. Nuese will assist with water sampling, buoy deployment, calibration of data sondes, care and maintenance of boat used for water sampling.

Derek Laodong, Student Hourly in Guo Lab, at \$14 per hour for 1000 hours for a total of \$14,000 in salary plus \$406 in fringe.

Wilson Tarpey, Student Hourly Intern in Miller Lab, at \$14 per hour for 1000 hours for a total of \$14,000 in salary plus \$406 in fringe.

Brooke Schurr, Student Hourly Intern in Newton Lab, at \$14 per hour for 1000 hours for a total of \$14,000 in salary plus \$406 in fringe.

**Supplies.** A total of \$38,528 is requested to pay for supplies to make the measurements listed below. This includes pipet tips, sample bottles and tubes, chemical solvents, certified reference standards, molecular biology reagents, field equipment maintenance costs, and instrument user fees.

Item	Description	Cost (\$)
Algal Toxins (Miller)	Quantification of two dozen	12,300
	algal toxins by LC-MS/MS	
Pigment Analysis	Quantification of chlorophyll	4,700
(Miller)	and phycocyanin	
Cyanobacterial Cell	Quantification of toxic	9,472
Abundance	cyanobacterial species	
(Newton)		
Abundance of	Quantification of bacteria	3,157
Sewage Associated	associated with sewage in	
Bacteria (Newton)	storm water samples	
Sewage Chemical	Quantification of chemicals	3,375
Indicators (Miller)	associated with sewage in	
	storm water samples, 15	
	samples at \$225/sample	

Biogeochemical	Quantification of phosphorus,	5,524
(Guo)	nitrogen, and carbon species	

# **Transportation (Miller)**

Boats - \$10 per sampling trip x 30 trips = \$300

Car – 10 miles per sampling trip at 0.54 cents per mile x 30 round trips = \$324

Truck – Usage of UWM state- owned truck at a rate of four half days at \$100 per day = \$200

#### **Totals**

Total Direct Costs = \$112,629 Total Indirect Costs = \$16,894 Total Costs = \$129,523

#### **COVID19 Safety Plan**

This project requires sampling water from Veterans Park Lagoon and storm drains as well as laboratory analyses. All staff will assist with this work, but we will take turns doing the required duties independently as much as possible with the exception of boat usage in which case two people must occupy the vessel for water saftey. Initial trainings for new staff will require two to three individuals to do the work for the first week with the PI for onboarding purposes. This will also require use of lab space to clean and autoclave sampling equipment and bottles and do chemical extractions and analyses. Whenever possible no more than two people will be in the same lab space of 300 square feet at the same time. Masks must be worn if more than one person is in the same lab space, with the exception of individuals from the same household. Whenever possible six feet social distancing will be required. After water samples are taken they will be delivered to respective laboratories. The person dropping off samples will be armed with a squeeze bottle of 70% ethanol to sanitize surfaces and gloved hands frequently after touching common surfaces. Workers will sanitize common surfaces in the lab before leaving including bench tops, door handles, and faucet handles. No more than two people will occupy the same vehicle. If two people occupy the same vehicle they must wear masks.

All personnel will be required to take body temperature readings daily. If anyone experiences a fever or <u>symptoms</u> of COVID19 they will be required to quarantine themselves and seek medical attention.

Should a member of personnel become sick or unable to work then the PI will take over their duties or reassigned to another staff member. If nobody is able to take over their duties then county parks will be notified that there will be delays in accomplishing the work or that work cannot be completed due to illness.

This plan has been reviewed by all participants in the research. All participants have acknowledge in writing or email that they understand the protocols, and the lead investigator retains these acknowledgements.

# According to University policy:

- 1. Faculty, students, and staff must not be compelled to engage in travel or lab activities if they are not comfortable with participating in the activity. However, to the extent such activities constitute part of their job duties, this may result in loss of salary if sufficient substitute duties cannot be assigned.
- 2. The lead researcher will inform their staff that they have the right to refuse to engage in activities that could expose them to the public and obtain positive consent of their willingness to assume the risks involved.
- 3. When working off-site, researchers must follow all local or state travel restrictions. If

- the field location is not a UW-Milwaukee site, the lead researcher will need to obtain travel and risk management approval using this form.
- **4.** No one should participate in any field work if they have any symptoms consistent with the current COVID pandemic (see the <u>CDC website</u>).
- 5. No more than two people may occupy a vehicle to, from, and at the work site. Masks (i.e., cloth face coverings) are to be worn in vehicles when there are two people who are not from the same household. High-touch areas (i.e., truck keys, door handles, and steering wheel) must be disinfected before and after the field day.
- **6.** If boats are to be used, the safety plan for each boat will specify the maximum number of total personnel allowed on the vessel at any time.
- 7. While traveling, the research team members should follow the <u>CDC guidelines</u> and <u>State of Wisconsin recommendations</u> regarding travel. During field tasks, individuals are required to wear masks when conducting tasks that require interacting with others less than six feet away.
- **8.** All members of the research team should bring ample water/liquids and food for themselves in clearly labeled bottles and containers. Sharing drinks or food is not allowed.
- **9.** Upon the completion of the field research all equipment must be disinfected.
- **10.** If the field work requires lodging and/or long-term stays:
  - **a.** Individuals planning to participate in remote work should take <u>steps to</u> <u>avoid illness</u> much as possible before traveling to the remote site.
  - **b.** If possible, the individual should have separate rooms unless they are from the same household.
  - **c.** The purchase of food and supplies and contact with society outside the field crew should be limited to as few individual interactions as possible.
- **11.** If a member of the field crew presents COVID-19 symptoms, the following steps are required:
  - **a.** The individual must cease field work and follow <u>State of Wisconsin</u> <u>guidelines for self-isolation</u>. Contingency funds for a separate hotel room or other measures must be considered by the lead investigator before research begins.
  - **b.** The individual must contact their health provider as soon as possible for further instructions.
  - **c.** The date an individual can return to work is subject to the public health guidelines at that time. These guidelines are changing frequently and thus a

delay of several weeks after the symptoms cease may be required.

**12.** If any member of the field party had close contact with an individual diagnosed with COVID-19, they should follow the State of Wisconsin recommendations for limited self-quarantine and self-monitoring.