FY2022 Alaska Ocean Observing System (AOOS) Core Budget Narrative

This budget narrative provides detail for the $2,649,136 FY2022 core budget for AOOS, which would support a basic observing system for the entire Alaska region. An additional $74,348 was included at the request of NOAA for a graduate student that is not part of the core funding. A total of $75,000 is included for four NOAA holdback projects. Total project value is 2,798,484 including all 3 categories.

a) PERSONNEL ($398,263)

Position Title & Name	Yearly Salary	% of Time	No. of Months	$ Amount
Executive Director, Sheyna Wisdom	$150,280	89.6%	10.75	$134,655
Director of Operations, Carol Janzen	$125,451	95%	11.4	$119,179
Director of Administration, Holly Kent	$84,872	100%	12	$84,872
Program Director, Darcy Dugan	$94,760	18%	2.16	$17,057
Outreach/OA Coordinator	$85,000	50%	6	$42,500
Total				**$398,263**

Justification:

Executive Director (ED), Sheyna Wisdom: This position oversees the overall management of the project as well as the implementation of project activities, including coordination with other agencies, development of materials, provision of in-service and training, gathering, tabulating, and interpreting of required data, program evaluation, staff performance. and ensuring necessary reports/documentation are submitted to the National Oceanic and Atmospheric Administration (NOAA). This position relates to all program objectives. This assumes no annual increase for this position at 89.6% of time (remaining salary covered by other grants).

Director of Operations, Carol Janzen: This position is responsible for providing technical expertise, management of subawards and contracts, management of data quality and data products, and compliance with the National Environmental Policy Act (NEPA). This assumes an increase of 3% from FY21 to FY22.

Director of Administration, Holly Kent: This position is responsible for management of grant and subaward documentation, submission of grant reporting documents, project outreach, and general administrative tasks. This assumes an increase of 3% from FY21 to FY22, but a change in role from joint Administration and Outreach to only Administration with the planned hiring of a new position.

Program Director, Darcy Dugan: This position is responsible for coordination and facilitation of the Alaska Ocean Acidification (OA) Network, management of ocean acidification related subawards and outreach, and other program management tasks. Darcy will be moving out of country in FY22 so will remain on staff as an hourly employee at 25% of time at the same salary rate of FY21.

Outreach Director/Coordinator (TBD): This new position would have two roles, one as the OA Network coordinator with assistance from Darcy Dugan and one as the Outreach Director. This assumes 50% of time under this core budget; the remaining salary will be covered under other NOAA drawlines.

b) FRINGE BENEFITS ($111,513)

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Executive Director, Sheyna Wisdom	$134,655	28%	$37,703
Director of Operations, Carol Janzen	$119,179	28%	$33,370
Director of Administration, Holly Kent	$84,872	28%	$23,764
Program Director, Darcy Dugan	$17,057	28%	$4,776
Outreach/OA Coordinator	$42,500	28%	$11,900
Total			**$111,513**

Justification: AOOS fringe benefit rates for all employees are estimated at 28% of annual salary but are charged as actual expenses.

c) TRAVEL ($7,476)

Airfare (round trips) was calculated at current seat rates on Travelocity or Alaska Airlines websites for appropriate dates, per diem was calculated using the applicable government per diem rates, and lodging was calculated based on internet research using Travelocity for spring dates.

Domestic Travel ($4,064)

Description	**$ Amount**
2 round trips x 1 person @ $1,100 airfare	$2,200
4 days per diem x $71/day x 1 person x 2 trips	$568
3 nights lodging x $216/night x 1 person x 2 trips	$1,296
Total	**$4,064**

Justification: In-person meetings are critical to facilitate networking between regional associations so the ED will travel two times from Anchorage, Alaska to Washington D.C. to attend IOOS Association meetings in the fall of 2022 and summer of 2023 when it is assumed that COVID travel restrictions will be lifted and/or not apply to non-agency personnel like the AOOS ED. Round trip airfare was estimated using the Alaska Airlines website for fall (October) and spring (March).

Description	**per trip**	**2 trips total**
1 round trips x 1 person @ $661 airfare	$661	$1,322

4 days per diem x $97/day x 1 person	$388	$776
3 nights lodging x $219/night x 1 person	$657	$1,314
Total	**$1,706**	**$3,412**

Justification: Stakeholder input is critical to informing AOOS program goals and requires travel to reach our diffuse population within the state. An AOOS staff member will travel from Anchorage to various locations within rural Alaska to facilitate stakeholder meetings at two villages. Travel in Alaska is very expensive so in an effort to reduce costs, AOOS staff will travel to remote locations instead of providing travel for multiple participants to Anchorage. Travel will most likely occur in the spring when it is assumed that COVID travel restrictions will be lifted within Alaska. The specific communities have not been selected, so we assumed the rates from Anchorage, Alaska to Bethel, Alaska. Round trip airfare was calculated using the Alaska Airlines website for spring.

d) EQUIPMENT ($14,997)

Item	Quantity	$ per unit	$ Total
Oceanographic instrumentation and mooring as part of collaborative project	1	$14,997	$14,997
Total			**$14,997**

Justification: Equipment costs of $14,997 are requested for purchase of oceanographic instrumentation and mooring accessories as part of a collaborative project.

e) SUPPLIES & COMMODITIES ($3,797)

Description	$ Amount
Program supplies	$100
Computer software & supplies	$2,997
Meeting supplies	$500
Office supplies	$200
Total	**$3,797**

Justification:

Program supplies: Includes branded materials for outreach at stakeholder conferences, meetings, and events. FY22 expenses are less than FY21 because the display materials purchased in FY21 can be used in FY22.

Computer program & supplies: FY22 expenses include the purchase of one laptop and display for the new Outreach personnel.

Meeting supplies: Expenses based on historical costs specifically for meeting supplies, such as name stickers, pens, clipboards, etc.

Office supplies: Expenses were based on historical costs and include paper, pens, and other commonly used supplies.

f) CONTRACTS/SERVICES ($765,867)

f1). KPMG, LLC ($20,000), audit

July 1, 2022 to June 30, 2023

KPMG, LLC will provide the annual audit service for AOOS.

Justification: Contractual costs of $20,000 are requested for the annual audit. FY21 expenses were covered by carryover funds from the previous agreement.

f2). Terragraphica ($10,000), graphic design

July 1, 2022 to June 30, 2023

Terragraphica will provide graphic design and website development services.

Justification: Contractual costs of $10,000 are requested for graphic design and website development services for outreach material/publications and development of new website components.

f3). Earth Web Technologies ($9,600), IT support

July 1, 2022 to June 30, 2023

EWT will provide IT support for AOOS staff.

Justification: Contractual costs of $9,600 ($800/month) are requested for IT support. FY21 expenses were covered by carryover funds from the previous agreement.

f4). HiTech Alaska ($4,000), video conference room support

July 1, 2022 to June 30, 2023

HiTech Alaska is separate from EWT; HiTech will be setting up the new video conference equipment for the shared office space.

Justification: Contractual costs of $4,000 are requested for hourly on-call support in FY22 for support needed for video conference setup and maintenance.

f5). To Be Determined ($45,000), wave buoy support

July 1, 2022 to June 30, 2023

Vessel support for ongoing wave buoy maintenance.

Justification: Contractual costs of $45,000 are requested for an as yet undetermined contractor to provide vessel support services for maintenance of the three AOOS maintained CDIP wave buoys.

f6). University of Washington (UW) Coastal Seabird Surveys ($25,000)

UW will provide standard Coastal Observation and Seabird Survey (COASST) training to Alaska coastal residents, expand COASST surveys, and provide AOOS with Alaska COASST data annually in a format that can be integrated directly into the AOOS data portal.

Justification: This was initially included as a subaward in FY21 but due to requirements from the PI for the value of the award, it was moved to contractual in FY21. This is carried over for FY22.

f7). Axiom Data Science ($510,000), core data management and cyberinfrastructure (DMAC)

July 1, 2022 to June 30, 2023

Maintenance of the core data management and cyberinfrastructure services required to support the AOOS Data Assembly Center (DAC).

Justification: Contractual costs of $510,000 are requested for AOOS to execute a contract with Axiom Data Science (Axiom) to provide consistently available data storage, delivery, and visualization tools integral to the AOOS program. Axiom was selected as a contractor for AOOS following an open, competitive process. Expenses include personnel and fringe for various Axiom staff members and a negotiated facility usage rate of 35%.

f8). Alaska SeaLife Center ($142,267), fiscal services

July 1, 2022 to June 30, 2023

Fiscal sponsorship and management including human resources services.

Justification: Contractual costs of $142,267 are requested for AOOS to execute a contract with the Alaska SeaLife Center (ASLC) to provide services including fiscal sponsorship, financial grant management, federal grant compliance, audit preparation, and human resource services (benefits management). Contractual costs were negotiated based on previous years' experience. Since 2003 the Seward Association for the Advancement of Marine Science dba the ASLC, has provided administrative and fiscal support services to AOOS. These services are defined by a Memorandum of Agreement that is reviewed on a yearly basis. FY22 expenses are based on a 3% increase over the FY21 expenses.

g) OTHER ($1,421,571)

Subawards ($1,320,907)

Contracts and subawards outside of the AOOS Core Funding are assessed a fiscal agent fee of 5% direct costs for drawlines that exceed $100,000 and 10% for drawlines less than $100,000 with a $1,000 minimum. Only one project in this narrative falls outside of the AOOS Core Funding, the Aleut Community of St. Paul (ACSP) ECOHAB student support (g21). The remaining subawards are considered Core Funded Projects.

g1). University of Alaska Fairbanks (UAF)/ASG Community Outreach Support ($25,000):

Will provide for ASG extension agents, often located in Alaskan coastal communities, to facilitate outreach and engagement in those communities and with a diverse group of Alaskan coastal stakeholders.

PERSONNEL $14,092

Position Title & Name	Hourly Rate	Hours	$ Amount
Outreach Specialist, To Be Determined	$64.92	179.02	$14,092
Total			**$14,092**

Justification: Project will not be charged for time the PI Eckert spends to administer the project. The TBD Outreach Specialist will develop and conduct outreach and engagement activities.

FRINGE BENEFITs $3,959

Position Title & Name	Project Salary	% Rate	$ Amount
Outreach Specialist, To Be Determined	$14,091	28.1	$3,959
Total			**$3,959**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 28.1% for faculty salaries.

INDIRECT $6,949

The rate is 38.5% and is computed on the following direct cost base of $18,500.

Personnel $14,092

Fringe $3,959

TOTAL $18,501

Multiplied by Indirect Cost Rate 38.5%

Total Indirect Cost $6,950

g2). UAF Ecosystem Approach to Fisheries Management (EAFM) Gliders ($240,000)

Will use gliders to collect data on regular transects in the Bering Sea and Gulf of Alaska for developing near-real-time indices of key physical and biological parameters that will inform the North Pacific Fisheries Management Council (NPFMC) decision-making process, and other marine and fisheries management related research activities.

PERSONNEL $41,202

Position Title & Name	Hourly Rate	Hours	$ Amount
Principal Investigator, Seth Danielson	$56.78	40	$2,686
Co-Principal Investigator, Tyler Hennon	$31.56	348	$11,933
Technician, Hank Statscewich	$41.61	522	$26,583
Total			**$41,202**

Justification: PI Danielson will oversee the project and ensure program success. Co-PI Hennon will provide piloting, mission planning, and glider maintenance duties. Statscewich will oversee the glider shop, and lead the maintenance, deployments, and piloting of the

gliders. Salaries are listed at the current FY22 rate and include a leave reserve of 15.4% for faculty, 6.0% for postdocs ≤ 3 Years, and 19.4% for professionals.

FRINGE BENEFITS $14,560

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Seth Danielson	$2,686	28.1%	$755
Co-Principal Investigator, Tyler Hennon	$11,933	27.7%	$3,305
Technician, Hank Statscewich	$26,583	39.5%	$10,500
Total			**$14,560**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 28.1% for faculty salaries, 27.7% for postdocs ≤ 3 Years, and 39.5% for professionals.

DOMESTIC TRAVEL $14,460

Item	**$ Amount**
4 Trips x 2 persons @ $350 airfare	$2,800
12 days per diem x $146/day x 2 persons	$3,504
12 nights lodging x $299/night x 2 persons	$7,176
Car rental x $125/day x 4 days	$500
Vehicle Fuel x $120 x 4 days	$480
Total	**$14,460**

Justification: Four trips are requested for two individuals to travel to Seward, AK to deploy (2 trips) and recover (2 trips) the glider for a total of 12 days.

EQUIPMENT $34,400

Item	**Quantity**	**$ per unit**	**$ Amount**
Glider Power Modules	2	$17,200	$34,400
Total			**$34,400**

Justification: Glider power modules (2 modules at $17,200/module) will be used for running the gliders.

SUPPLIES/COMMODITIES $4,834

Item	**$ Amount**
Lab Supplies (zip ties, aquarium salt, DC-111, O-ring Lube, Kim Wipes, hand tools, etc.)	$1,594
Glider Spares (ejection weight kit, o-ring kit, hardware kit)	$840

Glider Lab Rugged Laptop	$2,400
Total	**$4,834**

Justification: Lab supplies are needed for glider mission preparation.

CONTRACTS/SERVICES $67,073

Item	**Quantity**	**$ per unit**	**$ Amount**
Slocum Glider Training	1	$4,632	$4,632
Satellite data transmit fees	180 days	$120	$21,600
Glider payload calibration	1	$2,000	$2,000
TWR service & repair	1	$841	$841
Vessel charter	2 days	$19,000	$38,000
Total			**$67,073**

Justification: Glider training is needed for operation of glider; stipend in the form of cash payouts for volunteer assistance for providing Traditional Ecological Knowledge (TEK) about the deployment and recovery sites; satellite data transmit fees will be incurred; freight costs will be used to ship the gliders roundtrip from Fairbanks, AK to Seward, AK, and also roundtrip from Fairbanks, AK to East Falmouth, MA for glider service; glider payload CTD calibration will be performed; and TWR service and repair charges include basic service and pressure test.

OTHER $4,000

Item	**Quantity**	**$ per unit**	**$ Amount**
Stipend for sharing of TEK about deployment/recovery sites	1	$500	$500
Freight	1	$3,500	$3,500
Total			**$4,000**

INDIRECT $59,471

Facilities and Administrative (F&A) Costs are negotiated with the Office of Naval Research (ONR). The rate for sponsored research at UAF is calculated at 55.0% (FY20-FY22 predetermined agreement) of Modified Total Direct Costs (MTDC). MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel	$41,202
Fringe	$14,560
Travel	$14,460
Supplies/Commodities	$4,834

Contracts/Services $29,073
Other $4,000
Modified Total Direct Costs **$108,129**
Multiplied by indirect cost rate of 55%
Total indirect cost $59,471

g3). *UAF Arctic High Frequency Radar (HFR) ($156,000):*

Will continue operation and maintenance of three long range high-frequency radar (HFR) sites on the northeastern Chukchi and western Beaufort coasts of Alaska in Wainwright, Point Barrow, and Cape Simpson.

PERSONNEL $45,027

Position Title & Name	**Hourly Rate**	**Hours**	**$ Amount**
Principal Investigator, Seth Danielson	$56.78	43.5	$2,922
Other Personnel, Rachel Potter	$42.46	435	$22,605
Other Personnel, Hank Statscewich	$41.61	261	$13,291
Other Personnel, To Be Determined	$19.34	261	$6,209
Total			**$45,027**

Justification: PI Danielson will oversee the project; Potter will maintain the central computer system, ensure land use permits are up to date and oversee day-to-day HFR operations; Statscewich will maintain HFR and RPM; TBD Personnel will assist with hardware maintenance and upkeep. Salaries are listed at the current FY22 rate and include a leave reserve of 15.4% for faculty, 24.1% for professionals, and 20.0% for support (classified) staff.

FRINGE BENEFITS $18,179

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Seth Danielson	$2,922	28.1%	$821
Other Personnel, Rachel Potter	$22,605	39.5%	$8,929
Other Personnel, Hank Statscewich	$13,291	39.5%	$5,250
Other Personnel, To Be Determined	$6,209	51.2%	$3,179
Total			**$18,179**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 28.1% for faculty salaries, 39.5% for professionals, and 51.2% for support (classified) staff.

DOMESTIC TRAVEL $7,905

Item	**$ Amount**
3 round trips x 2 persons @ $472.50 airfare	$2,835
9 days per diem x $129/day x 2 persons	$2,322
Total	**$5,157**

Justification: Three trips are requested for two individuals to travel from Fairbanks, AK to Barrow, AK for HFR maintenance trips. The airfare is calculated using Alaska Airlines website, per diem calculated based on UAF approved rates.

Item	**$ Amount**
1 round trip x 2 persons @ $892.50 airfare	$1,785
2 days per diem x $77/day x 2 persons	$308
1 night lodging x $275 x 2 persons	$550
Ground transportation 1 day @ $105/day	$105
Total	**$2,748**

Justification: One trip is requested for two individuals to travel from Fairbanks, AK to Wainwright, AK to service the HFR. Airfare calculated Fairbanks to Utqiaġvik on Alaska Airlines website; airfare from Utqiaġvik to Wainwright calculated using Wright Air reservation call line.

SUPPLIES/COMMODITIES $1,340

Item	**$ Amount**
Project supplies such as cables, hard drives, UPS, guyline, etc.	$1,340
Total	**$1,340**

CONTRACTS/SERVICES $26,514

Item	**Quantity**	**$ per unit**	**$ Amount**
UIC Science	1	$23,854	$23,854
HughesNet Satellite Communications	1	$1,150	$1,150
AT&T Cellular Modem Communications	1	$1,150	$1,150
Garmin-InReach Services	1	$360	$360
Total			**$26,514**

Justification: UIC Science will assist with HFR maintenance, rentals, and lodging; HughesNet Satellite Communications will transfer HFR data; air freight is needed to ship equipment;

AT&T Cellular Modem Communications will transfer data; Garmin-InReach Services will provide an emergency beacon to the field team; and short-term space rental is needed for HFR maintenance gear.

OTHER $2,054

Item	Quantity	$ per unit	$ Total
Air freight	1	$1,000	$1,000
Short-term space rental for HFR maintenance gear	1	$1,054	$1,054
Total			**$2,054**

INDIRECT $54,981

F&A Costs are negotiated with ONR. The rate for sponsored research at UAF is calculated at 55.0% (FY20-FY22 predetermined agreement) of MTDC. MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel	$45,027
Fringe	$18,179
Travel	$7,905
Supplies/Commodities	$1,340
Contracts/Services	$26,514
Other	$1,000
Modified Total Direct Costs	**$99,965**

Multiplied by indirect cost rate of 55%

Total indirect cost $54,981

g4). *UAF Bering Strait HFR ($115,000):*

Will operate and maintain long-range HFR installations that measure surface currents in Bering Strait and report these results to the public and governmental stakeholders in near real time.

PERSONNEL $41,473

Position Title & Name	Hourly Rate	Hours	$ Amount
Principal Investigator, Seth Danielson	$56.78	42.5	$2,854
Other Personnel, Rachel Potter	$42.46	348	$18,084
Other Personnel, Hank Statscewich	$41.61	261	$13,291
Other Personnel, To Be Determined	$19.34	304.50	$7,244
Total			**$41,473**

Justification: PI Danielson will oversee the project and data applications; Rachel Potter will manage the land use permits, ensure operation of the HFR base station, and remote data

transfers; Hank Statscewich will lead the field installations and maintenance; and a TBD Personnel will assist Statscewich in the field. Salaries are listed at the current FY22 rate and include a leave reserve of 15.4% for faculty, 19.4% for professionals, and 20.0% for support (classified) staff.

FRINGE BENEFITS $16,904

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Seth Danielson	$2,854	28.1%	$802
Other Personnel, Rachel Potter	$18,084	39.5%	$7,143
Other Personnel, Hank Statscewich	$13,291	39.5%	$5,250
Other Personnel, To Be Determined	$7,244	51.2%	$3,709
Total			**$16,094**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 28.1% for faculty salaries, 39.5% for professionals, and 51.2% for support (classified) staff.

DOMESTIC TRAVEL $7,032

Item	**$ Amount**
2 round trips x 2 persons @ $1,365 airfare	$5,460
3 days per diem x $113/day x 2 persons	$678
2 nights lodging x $171x 2 persons	$684
Ground transportation 2 days @ $105/day	$210
Total	**$7,032**

Justification: Two trips are requested per year for two individuals on a multi-destination trip from Fairbanks, AK to Wales, AK, with continuing travel to Shishmaref, AK to visit the HFR sites and keep them running. Airfare is calculated from Fairbanks to Nome, AK using Alaska Airlines website; airfare from Nome to Wales and Shishmaref using Bering Air website.

SUPPLIES/COMMODITIES $1,000

Item	**$ Amount**
Project supplies such as cables, hard drives, UPS, guyline, etc.	$1,000
Total	**$1,000**

CONTRACTS/SERVICES $6,685

Item	**Quantity**	**$ per unit**	**$ Amount**
WNC Niviniagvik	1	$2,350	$2,350

Shishmaref Native Corporation	1	$2,335	$2,335
GCI Cellular Modem Communications	1	$600	$600
HughesNet Satellite Communications	1	$1,150	$1,150
Permitting Fees	1	$250	$250
Total			**$6,685**

Justification: WNC Niviniagvik will provide land use fees and logistics support; Shishmaref Native Corporation will provide land use fees and logistics support; air freight costs will be used for shipping gear to the villages; GCI Cellular Modem Communications for cellular data fees; HughesNet Satellite Communications for satellite data fees; permitting fees will be used for land use; and stipends in the form of cash will be used for incidental assistance from local representatives sharing TEK.

OTHER $1,100

Item	**Quantity**	**$ per unit**	**$ Amount**
Air freight	1	$1,000	$1,000
Stipend for Alaska Native assistance sharing TEK at sites	1	$100	$100
Total			**$1,100**

INDIRECT $40,806

F&A Costs are negotiated with ONR. The rate for sponsored research at UAF is calculated at 55.0% (FY20-FY22 predetermined agreement) of MTDC. MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel	$41,473
Fringe	$16,904
Travel	$7,032
Supplies/Commodities	$1,000
Contracts/Services	$6,685
Other	$1,100
Modified Total Direct Costs	**$74,194**

Multiplied by indirect cost rate of 55%

Total indirect cost $40,806

g5). *UAF Ecosystem Moorings ($85,000):*

Will continue the incremental build-out, operations, and maintenance of a network of Alaska-region moored marine ecosystem observatories by funding the procurement of new equipment, maintenance of existing sensors, and support of ongoing field operations.

PERSONNEL $1,343

Position Title & Name	**Hourly Rate**	**Hours**	**$ Amount**
Principal Investigator, Seth Danielson	$56.78	20	$1,343
Total			**$1,343**

Justification: PI Danielson will oversee the project. Salary is listed at the current FY22 rate and includes a leave reserve of 15.4%.

FRINGE BENEFITS $377

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Seth Danielson	$1,343	28.1%	$377
Total			**$377**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 28.1% for faculty salaries, 39.5% for professionals, and 51.2% for support (classified) staff.

EQUIPMENT $48,000

Item	**Quantity**	**$ per unit**	**$ Amount**
SBE37 CTD datalogger	1	$8,000	$8,000
Camera/AZFP/ADCP tripod	1	$15,000	$15,000
Sexton camera	1	$25,000	$25,000
Total			**$48,000**

Justification: All parts are required for mooring fabrication.

Equipment Fabrication Personnel $5,256

Position Title & Name	**Hourly Salary**	**Hours**	**$ Amount**
Fabricator, Pete Shipton	$33.69	156	$5,256
Total			$5,256

Justification: Pete Shipton will fabricate the moorings.

Equipment Fabrication Fringe $2,691

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Fabricator, Pete Shipton	$5,256	51.2%	$2,691
Total			**$2,691**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 51.2% for support (classified) staff

SUPPLIES/COMMODITIES $7,500

Item	**$ Amount**
Field supplies such as line, shackles, tools, droplinks, etc.	$2,000
Batteries for mooring instrumentation	$5,500
Total	**$7,500**

CONTRACTS/SERVICES $9,524

Item	**Quantity**	**$ per unit**	**$ Amount**
Sensor refurbishment/upgrades	1	$5,000	$5,000
Sensor calibration	1	$4,000	$4,000
Satellite data fees	1	$524	$524
Total			**$9,524**

Justification: Sensor refurbishment/upgrades are required by normal wear and tear, sensor calibration of the CTD, acoustic and optical instruments is required, and satellite data fees are requested for transfer of data to UAF.

INDIRECT $10,309

F&A Costs are negotiated with ONR. The rate for sponsored research at UAF is calculated at 55.0% (FY20-FY22 predetermined agreement) of MTDC. MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel $1,343
Fringe $377
Supplies/Commodities $7,500
Contracts/Services $9,524
Modified Total Direct Costs **$18,744**
Multiplied by indirect cost rate of 55%
Total indirect cost $10,309

g6). *UAF Chukchi Glider ($65,000):*

A joint project through UAF, Woods Hole Oceanographic Institute (WHOI), and Oregon State University (OSU) to conduct a simultaneous marine mammal and oceanographic survey of the Chukchi Sea using a Slocum autonomous underwater glider during the summers of 2021-2025.

PERSONNEL $10,338

Position Title & Name	Hourly Rate	Hours	$ Amount
Other Personnel, Hank Statscewich	$41.61	203	$10,338
Total			**$10,338**

Justification: The project will not be charged for the time PI Danielson spends to administer it. Statscewich will prepare glider for deployment, facilitate deployment and recovery operations, and perform glider maintenance. Salaries are listed at the current FY22 rate and include a leave reserve of 19.4% for professionals.

FRINGE BENEFITS $4,084

Position Title & Name	Project Salary	% Rate	$ Amount
Other Personnel, Hank Statscewich	$10,338	39.5%	$4,084
Total			**$4,084**

Justification: Staff benefits are applied according to UAF's FY22 provisional fringe benefit rates. Rates are 28.1% for faculty salaries, 39.5% for professionals, and 51.2% for support (classified) staff.

DOMESTIC TRAVEL $8,074

Item	$ Amount
1 round trip x 1 person @ $683 airfare	$683
4 days per diem x $118/day x 1 person	$472
4 nights lodging x $200 x 1 person	$800
Ground transportation 1 day @ $158/day	$158
Total	**$2,113**

Justification: One trip is requested for one individual to travel from Fairbanks, AK to Nome, AK to deploy the glider. Airfare was calculated using the Alaska Airlines website.

Item	$ Amount
1 round trip x 1 person @ $4573 airfare	$473
4 days per diem x $129/day x 1 person	$516
4 nights lodging x $326 x 1 person	$1,304
Ground transportation 1 day @ $158/day	$158
Total	**$2,451**

Justification: One trip is requested for one individual to travel from Fairbanks, AK to Utqiaġvik, AK for glider recovery. Airfare was calculated using the Alaska Airlines website.

Item	$ Amount
1 round trip x 2 persons @ $262.50 airfare	$525
3 days per diem x $146/day x 2 persons	$876
3 nights lodging x $299 x 2 persons	$1,794
3 days ground transportation @ $105/day	$315
Total	**$3,510**

Justification: One trip is requested for two individuals to travel from Fairbanks, AK to Seward, for glider testing. Airfare was calculated from Fairbanks, AK to Anchorage, AK using the Alaska Airlines website; ground transportation from Anchorage, AK to Seward, AK using Travelocity website rental car rates.

EQUIPMENT $17,200

Item	Quantity	$ per unit	$ Amount
Lithium power pack	1	$17,200	$17,200
Total			**$17,200**

Justification: For the purchase of a lithium power pack for the glider.

SUPPLIES/COMMODITIES $108

Item	$ Amount
Miscellaneous field tools and consumables such as tape, wire cutters, etc.	$108
Total	**$108**

CONTRACTS/SERVICES $14,250

Item	Quantity	$ per unit	$ Amount
Instrument calibration	1	$900	$900
Satellite data fees	1	$9,600	$9,600
Vessel charter in Seward, AK	1	$3,750	$3,750
Total			**$14,250**

Justification: Shipping costs are requested to ship glider from Fairbanks, AK to Seward, AK, and from Seward, AK to Nome, AK; instrument calibration; satellite data fees; and a vessel charter for glider deployment in Seward, AK.

OTHER$1,856

Item	Quantity	$ per unit	$ Amount
Shipping Fairbanks to Seward	1	$856	$856

Shipping Seward to Nome	1	$1,000	$1,000
Total			**$1,856**

INDIRECT $9,090

F&A Costs are negotiated with ONR. The rate for off-campus research, instruction and training, and other sponsored activities at UAF is calculated at 26% (FY20-FY22 predetermined agreement) of MTDC. Off-campus rates apply to sponsored projects where more than 50% of the university effort is conducted off-campus. Off-campus is defined as a facility which is not owned or leased by the institution, a facility leased by the institution where the lease costs are charged as direct costs to the award, or a temporary worksite (i.e., field location). The majority of this project will take place off campus at fieldwork locations. MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel	$10,338
Fringe	$4,084
Travel	$8,074
Supplies/Commodities	$108
Contracts/Services	$10,500
Other	$1,856
Modified Total Direct Costs	**$34,960**

Multiplied by indirect cost rate of 26%

Total indirect cost $9,090

g7). *UAF Seward Line ($116,000):*

Will maintain support of a long-term time series of physical, biological, and chemical oceanographic conditions in the Gulf of Alaska to understand climate variability and ecosystem change.

CONTRACTS/SERVICES $115,342

Item	**Quantity**	**$ per unit**	**$ Amount**
9-day vessel charter @ $12,815 per day	1	$115,342	$115,342
Total			**$115,342**

Justification: The R/V *Tiglax* will be chartered for 9 days to complete the research cruise.

OTHER $658

Item	**Quantity**	**$ per unit**	**$ Amount**
Dockside crane rental in Seward, AK	1	$658	$658
Total			**$658**

Justification: Dockside crane rental in Seward, AK is requested for loading equipment on vessel.

g8). *UAF Sea Ice Atlas ($6,000):*

Will update the Historical Sea Ice Atlas with periodic additions of the latest sea ice concentrations to the database of HSIA historical grids and will support modernization of the user interface to incorporate recent software enhancing the visualization tools and extending the suite of visualizations available to users.

PERSONNEL $2,775

Position Title & Name	**Hourly Rate**	**Hours**	**$ Amount**
Other Personnel, Kyle Redilla	$36.20	61.1	$2,775
Total			**$2,775**

Justification: The project will not be charged for time PI Walsh spends to administer it. Kyle Redilla will make updates to the Historical Sea Ice Atlas. Redilla's salary is listed at the FY22 rate and includes a 19.4% professional leave reserve.

FRINGE BENEFITS $1,096

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Other Personnel, Kyle Redilla	$2,775	39.5%	$1,096
Total			**$1,096**

Justification: Staff benefits are applied at 39.5% for professional salaries according to UAF's FY21 provisional fringe benefit rates.

INDIRECT $2,129

F&A Costs are negotiated with ONR. The rate for sponsored research at UAF is calculated at 55.0% (FY20-FY22 predetermined agreement) of MTDC. MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel $2,775

Fringe $1,096

Modified Total Direct Costs **$3,871**

Multiplied by indirect cost rate of 55%

Total indirect cost $2,129

g9). *UAF OA Time Series ($29,000):*

Will collect biogeochemical measurements at the GAKOA and M2 moorings in Resurrection Bay and the southeastern Bering Sea, continuing a long-term time series begun in 2011.

PERSONNEL $2,047

Position Title & Name	**Hourly Rate**	**Hours**	**$ Amount**

Principal Investigator, Natalie Monacci	$40.80	40	$2,047
Total			**$2,047**

Justification: PI Monacci will coordinate collection, data processing, and deliverables for seawater samples taken at moored sensors at GAKOA and M2. Salaries are listed at the current FY22 rate and include a leave reserve of 19.4% for professionals as well as an annual inflation increase of 2.5%.

FRINGE BENEFITS $809

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Natalie Monacci	$2,047	39.5%	$809
Total			**$809**

Justification: Staff benefits are applied according to UAF's FY21 fixed fringe benefit rates. Rates are 39.5% for professionals.

SUPPLIES/COMMODITIES $1,000

Item	**$ Amount**
Batteries	$1,000
Total	**$1,000**

CONTRACTS/SERVICES $13,740

Item	**Quantity**	**$ per unit**	**$ Amount**
Lab Analysis, services, and testing	1	$9,240	$9,240
GAKOA and M2 seabird service	1	$4,500	$4,500
Total			**$13,740**

Justification: Seawater samples are analyzed at the Ocean Acidification Research Center (OARC) for Dissolved Inorganic Carbon (DIC) and Total Alkalinity (TA); shipping costs are associated with the maintenance, recovery, and deployment of the supported sensors; and mooring services consist of maintenance costs for autonomous sensors (i.e., Seabird Electronics seaCAT).

OTHER $1,114

Item	**Quantity**	**$ per unit**	**$ Amount**
Freight and parcel post	1	$1,114	$1,114
Total			**$1,114**

INDIRECT $10,290

F&A Costs are negotiated with ONR. The rate for sponsored research at UAF is calculated at 55.0% (FY20-FY22 predetermined agreement) of MTDC. MTDC includes Total Direct Costs minus tuition and associated fees, scholarships, participant support costs, rental/lease costs, subaward amounts over $25,000, and equipment.

Personnel	$2,047
Fringe	$809
Supplies/Commodities	$1,000
Contracts/Services	$13,740
Other	$1,114
Modified Total Direct Costs	**$18,710**

Multiplied by indirect cost rate of 55%

Total indirect cost $10,290

g10). *UW Ocean Acidification Ferry ($7,000):*

Will aid in the understanding of OA conditions and variability along the SE coast of Alaska, Canada's Pacific coast, all the way to Washington State. A partnership with the Alaska Marine Highway System (AHMS) has allowed M/V *Columbia* to be used as a platform to make the required OA observations.

PERSONNEL $3,276

Position Title & Name	**Monthly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Research Scientist, Geoff Lebon	$8,191	40%	.04	$3,276
Total				**$3,276**

Justification: Mr. Lebon will troubleshoot and maintain the pCO2 instrument on the M/V *Columbia*. No funds are requested for PI Calvin Mordy, who is serving in an advisory role only, and will do so on an as-needed basis

FRINGE BENEFITS $1,068

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Research Scientist, Geoff Lebon	$3,276	32.6%	$1,068
Total			**$1,068**

Justification: The current benefit rate for UW professional staff is 29.4 %.

DOMESTIC TRAVEL $568

Item	**$ Amount**
2 round trips x mileage 170 miles x $0.585 per mile	$199
2 days per diem x $44.25/day x 1 person x 2 trips	$177
1 nights lodging x $96/day x 1 person x 2 trips	$192

Total	**$568**

Justification: Mr. Lebon will use his personal vehicle to travel to Bellingham (80 miles) to service the pCO2 instrument aboard the M/V *Columbia*. Mileage was calculated using the 2022 Federal mileage rate.

SUPPLIES/COMMODITIES $643

Item	**$ Total**
Project supplies	$643
Total	**$643**

INDIRECT $1,445

The current UW off-campus rate overhead is 26% of MTDC. MTDC includes all direct costs less capital equipment, graduate operating fees, and the amount of subawards above the initial $25,000.

Personnel	$3,276
Fringe	$1,068
Domestic Travel	$568
Supplies/Commodities	$643
Modified Total Direct Costs	$5,555

Multiplied by indirect cost rate of 26%

Total indirect cost $1,445

g11). *OSU Chukchi Glider ($18,459):*

A joint project through UAF, WHOI, and OSU to conduct a simultaneous marine mammal and oceanographic survey of the Chukchi Sea using a Slocum autonomous underwater glider during the summers of 2021-2025.

PERSONNEL $5,923

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Principal Investigator, Kate Stafford	$115,000	5%	0.62	$5,923
Total				**$5,923**

Justification: PI Stafford's time to interact with PIs Mark Baumgartner (WHOI) and Seth Danielson (UAF) to design annual summer glider tracks for the Chukchi, integrate acoustic and oceanographic data, and undertake logistics to get the glider in the water.

FRINGE BENEFITS $2,902

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Kate Stafford	$5,923	49%	$2,901

Total			**$2,901**

Justification: The OSU fringe benefit rate for 7/1/2020-6/30/2022 is 49%.

DOMESTIC TRAVEL $3,506

Item	**$ Amount**
1 round trip x 1 person @ $1,161 airfare	$1,161
6 days per diem x $125/day x 1 person	$750
1 nights lodging x $216/night x 1 person + 5 nights lodging x $229/night x 1 person	$1,361
Airport transfers and parking	$234
Total	**$3,506**

Justification: Travel to the Alaska Marine Science Symposium in January 2023 from Seattle, AK to Anchorage, AK. Airfare calculated using the Alaska Airlines website.

OTHER $100

Item	**Quantity**	**$ per unit**	**$ Amount**
Alaska Marine Science Symposium registration fee	1	$100	$100
Total			**$100**

Justification: Charges for conference Alaska Marine Science Symposium registration fee.

INDIRECT $6,029

The indirect rate for OSU is 48.5%.

Personnel	$5,923
Fringe	$2,901
Domestic Travel	$3,506
Other	$100
Modified Total Direct Costs	$12,430

Multiplied by indirect cost rate of 48.5%

Total indirect cost $6,029

g12). *WHOI Chukchi Glider ($15,000):*

A joint project through UAF, WHOI, and OSU to conduct a simultaneous marine mammal and oceanographic survey of the Chukchi Sea using a Slocum autonomous underwater glider during the summers of 2021-2025.

PERSONNEL $6,389

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Principal Investigator, Mark Baumgartner	$194,092	3%	0.36	$6,308

Administrative Associate	$97,204	0.08%	0.01	$81
Total				**$6,389**

Justification: PI Baumgartner will assist with the preparation of the DMON acoustic instrument, pilot the glider in the Chukchi Sea, manage the real-time website for the glider (dcs.whoi.edu), and participate in data analysis. An Administrative Associate will provide administrative support for tasks that are specific to the project and not supported by overhead including assisting with project reporting and budget monitoring.

FRINGE BENEFITS $2,683

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Mark Baumgartner	$6,308	41.99%	$2,649
Administrative Associate	$81	41.99%	$34
Total			**$2,683**

Justification: Employee benefits have been proposed using composite weighted average rates that are the total assignable to salaries of regular employees including paid absences, excluding Graduate Research Assistants, overtime salaries & allotted paid leave benefits. The period composite rates are weighted averages of the specific rates for each fiscal year in accordance with WHOI's 2022 provisional rate agreement (dated 12/9/2021) and 2019 Provisional Forward Pricing Letter (dated 2/12/2019) with ONR. The composite rate for this project year is 41.9944%.

SUPPLIES/COMMODITIES $18

Miscellaneous project supplies.

INDIRECT $5,910

The current 2022 indirect cost rate (MTDC) for WHOI is 65.04%, for 2023 and beyond is 65%. WHOI has an annually negotiated rate agreement with the ONR and used the method of allocation of indirect costs to MTDC. The rates included in this proposal are those negotiated with ONR annually. When proposal cross fiscal years, composite rates are based up on the duration of time in each fiscal year. The normal exclusions contained in 2 CFR 200.1 "Modified Total Direct Cost" apply. Period 1 (7/1/2022 – 6/30/2023): MTDC = Base $99090) x Rate ($65.0202%) = $5910.

Personnel $6,389

Fringe $2,683

Supplies/Commodities $18

Modified Total Direct Costs $9,090

Multiplied by consolidated indirect cost rate of 65.0202%

Total indirect cost $5,910

g13). Alaska Department of National Resources (ADNR) Coastal Hazard Projects ($60,000):

Will assist AOOS and NOAA in efforts to improve access to water level measurements in remote parts of Alaska.

PERSONNEL $23,604

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Geologist IV, Jacquelyn Overbeck	$92,916	10%	1.2	$9,292
Geologist III, TBD	$59,704	10%	1.2	$5,970
Geologist I, Zachary Siemsen	$52,137	16%	1.92	$8,342
Total				**$23,604**

Justification: PI Overbeck will facilitate Alaska Water Level Watch (AWLW) steering committee and annual meetings and conduct project management at 10% FTE. Geologist III TBD will oversee all project activities and manage field travel and installations at 10% FTE. Geologist I Siemsen will assist on field installations, write sensor metadata, and monitor real-time data stream at 16% FTE.

FRINGE BENEFITS $14,259

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Geologist IV, Jacquelyn Overbeck	$9,292	60%	$5,575
Geologist II, TBD	$5,970	70%	$4,179
Geologist I, Zachary Siemsen	$8,342	54%	$4,505
Total			**$14,259**

Justification: All full-time employees receive the full health benefit, leave cash-in, risk management, unemployment insurance, term leave, supplemental SBS benefits, and a Medicare deduction. While permanent employees are eligible for an additional retirement benefit which makes up the difference in the fringe percentages. Interns are not full-time employees and are only eligible for department benefits and Medicare deduction.

DOMESTIC TRAVEL $5,746

Item	**$ Amount**
1 flight Anchorage to Bethel @$134 x 2 flights x 2 persons	$536
1 flight Bethel to Tununak @$190 x 2 flights x 2 persons	$760
Lodging in Tununak school @$120 per person x 1 night x 2 persons	$240
Per diem in Tununak @$45 per person x 2 days x 2 persons	$180
Ground transportation in Tununak @$200 per days x 2 days	$400

Incidentals in Tununak (baggage fees, parking, gas, incidentals) @ $350	$350
Total	**$2,466**

Justification: Sensor re-installation at Tununak for 2 staff over 2 days. Flights from Anchorage to Bethel $134 per person per flight, Bethel to Tununak $190 per person per flight, round trip total $1,296. Lodging one night at the Tununak school, $120 per night per person, total $240. Per diem, $45 on 2 travel days, $90 per person, total $180. Transportation rentals, $200 per day in Tununak for 2 days, total $400. Baggage fees, parking, gas, and incidentals, $350. Total trip, $2,466.

Item	**$ Amount**
1 flight Anchorage to remote village hub (TBD) @$150x 2 flights x 2 persons	$600
1 flight village hub to village @$225 x 2 flights x 2 persons	$900
Lodging in village @$120 per person x 2 nights x 2 persons	$480
Per diem in village @$45 per person x 2 days x 2 persons	$180
Per diem travel @$60 per person x 1 days x 2 persons	$120
Ground transportation in village @$200 per days x 3 days	$600
Incidentals in village (baggage fees, parking, gas, incidentals) @ $400	$400
Total	$3,280

Justification: Sensor re-installation at location TBD for 2 staff over 3 days. Flights from Anchorage to general hub $150 per person per flight, general hub to village at $225 per person per flight, round trip total $$1,500. Lodging one night at the village, $120 per night per person, total $480. Per diem, $45 on 2 travel days at $60 on 1 travel days, $150 per person, total $300. Transportation rentals, $200 per day TBD for 3 days, total $600. Baggage fees, parking, gas, and incidentals, $400. Total trip, $3,280.

SUPPLIES/COMMODITIES $167

Item	**Cost**	**Qty**	**$ Amount**
Field supplies (tools, hardware, travel boxes, survey equipment replacements, etc.)	$117	1	$117
Office supplies (reference materials, printing, etc.)	$50	1	$50
Total			**$167**

CONTRACTS/SERVICES $9,398

Item	**Quantity**	**$ per unit**	**$ Amount**
data and extended warranties on existing Stillwater iGages (8) and iRadars (2)	10	$491	$4,910

GCI cellular service on web cameras	24	$17	$408
Satellite beach camera service	12	340	$4,080
Total			**$9,398**

Justification: Data and warranty services on existing hardware, including 10 Stillwater Technologies, LLC sensors at $491 per sensor, GCI cellular services for2 devices at $17 per month per device for 12 months, and satellite camera data service at $340 per month for 12 months.

INDIRECT $6,826

SOA federally negotiated indirect is 18.03% of personnel charges.

Personnel $23,604

Fringe $14,259

Modified Total Direct Costs $37,863

Multiplied by consolidated indirect cost rate of 18.03%

Total indirect cost $6,826

g14). <u>Wildlife Technology Frontiers (WTF) Kenai Fjords Ocean Tracking Network ($21,000):</u>

Service and re-deploy one Innovasea 69 kHz acoustic tracking receiver of type VR2AR in the Kenai Fjords area, to extend the existing acoustic tracking array deployed in Prince William Sound (PWS). Includes support for an Alaska Native Science and Engineering Program (ANSEP) intern to participate in field research activities and outreach products.

PERSONNEL $5,540

Position Title & Name	**Hourly Rate**	**Hours**	**$ Amount**
Principal Investigator, Markus Horning	$138.50	40	$5,540
Total			**$5,540**

Justification: Support is requested for PI Horning at the all-inclusive rate of $138.50 per hour (includes Fringe/OPE), for preparing equipment, deploying equipment, recovering, and servicing equipment.

SUPPLIES/COMMODITIES $1,747

Item	**Unit**	**Qty**	**$ Amount**
Mooring supplies	$350	1	$350
Innovasea VR2AR redeployment parts	$83	1	$83
Innovasea Tadiran battery	$47	1	$47
Total			$480

Justification: Support is requested for the purchase of mooring supplies (one set for redeployment after servicing) at $350 each, one Innovasea kit of VR2AR redeployment parts $83, one Tadiran replacement battery for servicing VR2AR after 12 months (these primary batteries have a life of approximately 14 months) $47.

CONTRACTS/SERVICES $6,850

Description	**Unit**	**Qty**	**$ Total**
Student undergraduate intern hired through temp agency	$6,850	1	$6,850
Total:			**$6,850**

Justification: Support is requested for hire of an undergraduate student intern in association with the Alaska Native Science and Engineering Program of the University of Alaska Anchorage through a temporary hiring staff hiring agency.

OTHER $6,221

Item	**Unit**	**Qty**	**$ Total**
Boat use fees 5 days @ $750 per day	$750	5	$3,750
Mooring permit fees @ $100 annual per mooring	$100	1	$100
Liability insurance as required for Land Use Permit	$2,261	1	$2,261
Innovasea dangerous goods handling fee	$30	1	$30
Innovasea shipping & handling	$80	1	$80
Total			**$6,221**

Justification: Support is requested for 5 days of vessel use at $750per day; one mooring permit application fee at $100 per year: institutional liability insurance coverage/rider required by the ADNR estimated at $$2,261 per year; shipping and handling from Innovasea ($80); and an additional hazardous goods handling fee for lithium battery shipment from Innovasea ($30).

INDIRECT $1,909

AMSA-WTF charges the federally permissible *De Minimis* indirect rate of 10% on all budget categories except equipment >$5,000

Personnel	$5,540
Supplies/Commodities	$480
Contracts/Services	$6,850
Other	$6,221
Modified Total Direct Costs	$19,091

Multiplied by indirect cost rate of 10%

Total indirect cost $1,909

g15). *Alutiiq Pride Marine Institute (APMI) Seward Burke-o-Lator ($30,000):*

Will maintain real-time continuous ocean acidification monitoring systems in Southcentral Alaska at the APMI, operating pCO2/TCO2 analyzers that record continuous water chemistry to determine aragonite saturation.

PERSONNEL $15,390

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Principal Investigator, Jacqueline Ramsay	$54,000	28.50%	3.42	$15,390
Total				**$15,390**

Justification: PI Ramsay will direct the project.

FRINGE BENEFITS $6,488

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Jacqueline Ramsay	$1,390	42.16%	$6,488
Total			**$6,488**

Justification: The fringe Rate for Jacqueline Ramsay is 42.16% and includes the following: FICA (6.2%), FICA MED (1.45%), ESC (1.52%), Workers Compensation (4.759%), 403(b) pension (5%), health, dental and life insurance (23.32%).

SUPPLIES/COMMODITIES $4,227

$4,227 Supplies and consumables utilized during DIC sampling and testing.

INDIRECT $3,895

The federally negotiated indirect rate of 14.92% is applied to direct costs.

Personnel $15,390

Fringe $6,488

Supplies/Commodities $4,227

Modified Total Direct Costs $26,105

Multiplied by indirect cost rate of 14.92%

Total indirect cost $3,895

g16). *Marine Exchange of Alaska (MXAK) Automatic Identification System and Harbor Safety ($102,000):*

Will enhance maritime safety and environmental protection in Alaska by providing real time, environmental information (weather, waves, currents) to vessels via Automatic Identification System (AIS) transmissions, adding new observing assets to harbors, and annually updating the AIS database.

PERSONNEL $19,867

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Field Technician, Nick Hatch	$100,984	5%	0.6	$5,049

Field Technician, Erik Bachmann	$85,800	3%	0.36	$2,574
Field Technician, Collin Wigsfield-Gorka	$73,320	3%	0.36	$2,200
Field Technician, Ed Shanley	$72,072	2%	0.24	$1,441
Field Technician, Kole Koski	$70,720	2%	0.24	$1,414
Technical Support, Ed Mayer	$115,440	2%	0.24	$2,309
Maritime Operations Analyst, Jen Dillon	$77,480	2%	0.24	$1,550
Principal Investigator, Shawn Mauldin	$110,000	3%	0.36	$3,330
Total				**$19,867**

Justification: Nick Hatch will provide lead field technician services, Erik Bachman, Collin Wigsfield-Gorka, Ed Shanley, and Kole Koski will provide field technician services, Ed Mayer will provide technical support services, Jen Dillon will provide maritime operations analysis, and Shawn Mauldin will provide project management services.

FRINGE BENEFITS $8,265

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Field Technician, Nick Hatch	$5,049	32%	$1,616
Field Technician, Erik Bachmann	$2,574	33%	$849
Field Technician, Collin Wigsfield-Gorka	$2,200	33%	$726
Field Technician, Ed Shanley	$1,441	32%	$461
Field Technician, Kole Koski	$1,414	32%	$453
Technical Support, Ed Mayer	$2,309	33%	$762
Maritime Operations Analyst, Jen Dillon	$1,550	33%	$511
Principal Investigator, Shawn Mauldin	$3,330	33%	$1,099
Payroll taxes			$1,788
Total			**$8,265**

Justification: Fringe benefits include FICA, vacation, sick, and holiday pay, healthcare, 401K plan, and fitness center access. The percentages vary depending on healthcare plan, the amount of 401K contribution and employee participation with the fitness program.

DOMESTIC TRAVEL $13,142

Item	**$ Amount**
MXAK Vessel Fuel ($4.35 per gallon x 650 miles)	$2,828

2 round trips x 2 persons airfare Juneau to Whittier ($500 per round trip)	$1,000
2 round trips x 2 persons airfare Juneau to Prudhoe Bay ($1300 per round trip)	$2,600
2 round trips x 2 persons airfare Juneau to Icey Bay ($900 per round trip)	$1,800
Lodging in Whitter/Prudhoe Bay/Icy Bay (2 nights x 2 persons @ $235 per night for reach trip): total of 14 nights	$3,290
Per diem in Whitter/Prudhoe Bay/Icy Bay (2 nights x 2 persons @ $116 per day for reach trip): total of 14 days	1,624
Total	**$13,142**

Justification: Fuel costs for MXAK vessel will be used to transport personnel to maintain, service and/or install new weather sensors in Southeast Alaska. Cost per gallon @ $4.35, boat burns 1 gallon/mile. Two people will travel from Juneau, AK to Whittier, AK to install new sensors. Two people will travel from Juneau to Whittier to install new sensors, and from Juneau to Prudhoe Bay to upgrade weather sensor. Cost includes airfare of $5,400 (2 persons @ $500 to Whittier, 2 persons @ $1,300 for Prudhoe Bay, and 2 persons @ $900 for Icy Bay), lodging of $3,290 (14 total nights @ $235 per night for 2 persons per trip for 2 nights), and per diem of $1,624 (14 total days @ $116 per day for 2 persons per trip for 2 nights) Airfare calculated from Juneau to Anchorage using Alaska Airlines website.

SUPPLIES/COMMODITIES $22,404

Item	**Cost**	**Qty**	**$ Amount**
Weather sensors	$3,700	4	$14,800
Power units, enclosures, cabling, misc. equip	$2,500	2	$5,000
Optical sensor and hardware	$2,604	1	$2,604
Total			**$22,404**

Justification: Sensors and associated parts and accessories will be purchased for each installation and the total estimated cost is $22,404. This includes weather sensors, optical sensors, power units, enclosures, cabling, and miscellaneous equipment to make all connections.

CONTRACTS/SERVICES $25,328

Item	**Quantity**	**$ per unit**	**$ Amount**
Operation of existing AOOS sites	1	$19,041	$19,041
Maintenance of existing AOOS sites	1	$4,923	$4,923
AIS Data Services	1	$2,750	$2,750
Total			**$26,714**

Justification: Operation of existing AOOS sites includes backhaul/internet monthly service fees for all existing AOOS sites, maintenance, and repair of damaged/failed WX and optical sensors, and AIS Data Services covers the annual AIS PAC Vessel Tracking data portal update.

OTHER $2,335

Shipping cost of $2,335 will be used to ship sensors and equipment to Juneau from the manufacturer, and to Whittier for installation at Pt. Pigot.

INDIRECT $9,273

The De Minimis rate of 10% is used.

Personnel	$19,867
Fringe	$8,265
Travel	$13,142
Supplies/Commodities	$22,404
Contracts/Services	$26,714
Other	$2,335
Modified Total Direct Costs	$92,727

Multiplied by indirect cost rate of 10%

Total indirect cost $9,273

g17). Prince William Sound Science Center (PWSSC) Weather and Fish Monitoring ($101,000):

Will maintain long-term observations of fish movements (Ocean Tracking Network [OTN] tracking), meteorological (SNOTEL weather stations), and oceanographic conditions (Cordova tide station CTD) established as part of the Prince William Sound Ocean Observing System.

PERSONNEL $7,044

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Principal Investigator, Dr. M.A. Bishop	$103,530	1%	0.12	$1,035
Deployment Technician	$40,750	8%	0.96	$4,060
Maintenance cruise technician	$48,720	4%	.048	$1,949
Total				**$7,044**

Justification: PI Bishop will organize the project and write reports. The Deployment Technician will build moorings and assist with the maintenance cruise. The Maintenance Cruise Technician will prep for and assist with the maintenance cruise.

FRINGE BENEFITS $2,020

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Dr. M.A. Bishop	$1,035	50%	$518

Deployment Technician	$40,60	13%	$528
Maintenance cruise technician	$1,949	50%	$974
Total			**$2,020**

Justification: Fringe includes FICA, health insurance, worker's compensation, social security, vacation, sick leave, and PWSSC employer contribution to 403k.

SUPPLIES/COMMODITIES $16,491

Item	**Cost**	**Qty**	**$ Amount**
Miscellaneous mooring supplies (batteries, lines)	$2,500	1	$2,500
VR2AR receiver release lugs 42@$65 ea	$65	42	$2,730
VR2AR acoustic receivers	$4,500	2	$9,000
Buoys	$800	2	$1,600
Miscellaneous supplies for conductivity sensor	$661	1	$661
Total			**$16,491**

CONTRACTS/SERVICES $26,000

SNOTEL station maintenance will be accomplished by the National Resource Conservation Service. They charge $3,250 per station for 8 stations serviced for a total contract cost of $26,000.

OTHER $30,000

Item	**Cost**	**Qty**	**$ Amount**
Welding	$1,000	1	$1,000
Shipping, communications, and internet	$1,000	1	$1,000
DNR Permits	$4,000	1	$4,000
Vessel charter OTN maintenance	$3,000	7	$21,000
Conductivity sensor maintenance	$3,000	1	$3,000
Total			**$30,000**

Justification: Welding is needed for preparation of chains for receiver moorings; shipping is included for CTDs, receivers, and buoys; communications include phone, fax, copy, and computer networks; the ADNR requires permits for OTN arrays; vessel charter is required for OTN maintenance; and the conductivity sensor maintenance includes calibration and refurbishment.

INDIRECT $19,445

PWSSC charges 35% of the Total Modified Direct Costs.

Personnel $7,044
Fringe $2,020
Supplies/Commodities $16,491
Other $30,000
Modified Total Direct Costs $55,555
Multiplied by indirect cost rate of 35%
Total indirect cost 19,445

g18). *Southeast Alaska Tribal Ocean Research (SEATOR) Sitka Burke-o-Lator ($15,000):*

Will bring more SEATOR partners online as discrete OA community samplers, to support current SEATOR sampling partners, and to continue to analyze discrete OA samples for Southeast Alaska. A report format that is easily understood by stakeholders and SEATOR partners will be developed with education materials.

PERSONNEL $5,000

Position Title & Name	Yearly Salary	% of Time	No. of Months	$ Amount
Environmental Specialist, TBD	$45,700	10%	1.2	$5,000
Total				**$5,000**

Justification: The Environmental Specialist will complete all Burke-o-Lator operations, ordering supplies, and maintenance.

FRINGE BENEFITS $1,750

Position Title & Name	Project Salary	% Rate	$ Amount
Environmental Specialist, TBD	$5,000	35%	$1,750
Total			$1,750

Justification: Fringe rate is 35% and includes FICA, pension, State unemployment Insurance, health insurance, vision insurance, dental insurance, worker's compensation.

SUPPLIES/COMMODITIES $3,737

Item	Cost	Qty	Total
Repair parts for BoL	$1,286	1	$1,186
Gases for BoL system	$1,000	1	$1,000
TSG services	$1,551	1	$1,551
Total			**$3,737**

INDIRECT $4,513

STA's indirect rate is 43.03% on all costs except pass throughs, contracts, and equipment.

Personnel $5,000

Fringe $1,750
Supplies/Commodities $3,737
Modified Total Direct Costs $10,487
Multiplied by indirect cost rate of 43.03%
Total indirect cost $4,513

g19). *Aleut Community of St. Paul (ACSP) Indigenous-led Monitoring ($10,000):*

Will leverage the capacity and resources of the Indigenous Sentinels Network (ISN) and provide resources for AOOS data contractor (Axiom) to explore ways to manage and make accessible Indigenous-collected data. The PI for this project will manage the project at no cost.

CONTRACTS/SERVICES $10,000
Axiom will be contracted to ACSP to provide appropriate curation and dissemination of culturally sensitive information.

g20). *JOA Water Level Tech ($30,000):*

Will service and maintain water level stations at Naknek and Dillingham.

PERSONNEL $15,000

Position Title & Name	**Yearly Salary**	**% of Time**	**No. of Months**	**$ Amount**
Principal Investigator, Nathan Wardwell	$100,000	3%	0.36	$3,000
Project Manager	$90,000	4%	0.48	$3,600
Field Technician III	$80,000	6%	0.72	$4,800
Field Technician II	$60,000	6%	0.72	$3,600
Total				**$15,000**

Justification: PI Wardwell will manage the project. A project manager will assist with managing this effort. The preparation, planning, fieldwork, reporting, and data processing will be conducted by a Field Technician III and a Field Technician II.

FRINGE BENEFITS $1,950

Position Title & Name	**Project Salary**	**% Rate**	**$ Amount**
Principal Investigator, Nathan Wardwell	$3,000	13%	$390
Project Manager	$3,600	13%	$468
Field Technician III	$4,800	13%	$624
Field Technician II	$3,600	13%	$468
Total			**$1,950**

Justification: The fringe benefits costs include payroll taxes, workers compensation insurance, and SIMPLE IRA retirement match for employees that are enrolled.

DOMESTIC TRAVEL $7,555

Item	**$ Total**
1 round trip x 2 persons @ $700 airfare	$1,400
5 days per diem x $132/day x 2 persons	$1,320
Vehicle rental @$140/day x 5 days	$700
Total	$3,420

Justification: This project requires travel to Naknek, Alaska to perform maintenance on the water level station. Airfare calculated based on Alaska Airlines website.

Item	**$ Total**
1 round trip x 2 persons @ $700 airfare	$1,400
5 days per diem x $203.50/day x 2 persons	$2,035
Vehicle rental @$140/day x 5 days	$700
Total	**$4,135**

Justification: This project requires travel to Dillingham, Alaska to perform maintenance on the water level station. Airfare calculated based on Alaska Airlines website.

SUPPLIES/COMMODITIES $1,468

Item	**Cost**	**Qty**	**Total**
Expendables such as zip ties, desiccant, hose clamps, nuts, bolts and other hardware	$668	1	$668
Survey equipment rental	$800	1	$800
Total			**$1,468**

OTHER $1,300

Shipping costs will cover transportation of equipment to field sites.

INDIRECT $2,727

An indirect rate of 10% is used in the budget to cover facilities costs as well as General & Administrative costs.

Personnel	$15,000
Fringe	$1,950
Travel	$7,555
Supplies/Commodities	$1,468
Other	$1,300

Modified Total Direct Costs $27,273
Multiplied by indirect cost rate of 10%
Total indirect cost $2,727

g21). *ACSP ECOHAB Student ($70,808)*

NOAA is providing funding for a UAF Master's student, Chelsea Kovalscik, to conduct a thesis project measuring exposure to paralytic shellfish toxins and domoic acid in northern fur seals on St. Paul Island in collaboration with ACSP. The project will increase the number of subsistence-harvested marine mammals observed, sampled, and tested for exposure to paralytic shellfish toxins and domoic acid. She will be advised by Dr. Lara Horstmann (UAF) and Dr. Kathi Levebfre (NOAA Northwest Fisheries Science Center) and will report to Dr. Lauren Divine (ACSP). Costs for this project includes project supplies, stipend, tuition, travel costs, and health insurance. The PI (Divine) for this project will manage the project at no cost.

DOMESTIC TRAVEL $14,919

Item	**$ Total**
Travel to NOAA Lab (Seattle)	
1 round trip airfare for 1 person Fairbanks to Seattle @ $700	$700
Lodging in Seattle for 1 person x 6 nights $ $189 per night	$1,134
Per diem in Seattle for 1 person x 5 days @ $79 per day	$395
Rental car in Seattle for 1 person	$500
Subtotal	*$2,729*
Travel to Alaska Marine Science Symposium (Anchorage, AK)	
1 round trip airfare for 1 person Fairbanks to Anchorage @ $300	$300
Lodging in Anchorage for 1 person x 6 nights $ $185 per night	$1,110
Subtotal	*$1,410*
Travel to St. Paul Island for field work (3x per year)	
3 round trips airfare for 1 person Fairbanks to St.Paul Island @ $1,600	$4,800
Subtotal	*$4,800*
Travel to Society for Marine Mammalogy Conference (2023) – location in Midwest TBD	
Round trip airfare for 1 person Fairbanks to TBD @ $2,100	$2,100
Lodging in TBD for 1 person x 6 nights $190 per night	$1,140
Per diem in TBD for 1 person x 5 days @ $69 per day	$345

Subtotal	*$3,585*
Travel to Symposium on Harmful Algae in the US – Albany, NY	
Round trip airfare for 1 person Fairbanks to Albany @ $800	$899
Lodging in Albany for 1 person x 6 nights $160 per night	$960
Per diem in Albany for 1 person x 5 days @ $69 per day	$345
Rental car in Albany for 1 person	$290
Subtotal	*$2,395*
Total:	**$14,919**

Justification: UAF Master Student Chelsea Kovalscik will travel to visit the NOAA Lab in Seattle to be trained by PI Kathi Lefebvre to run her own samples. Travel costs include round trip airfare from Fairbanks to Seattle in September at $700 (based on AK Airlines), lodging for 5 nights for average hotel rates in Seattle for September at $189 per night, per diem for 5 nights at Federal GSA rate for Seattle at $79 per day, rental car based on average price of car for one week in King County.

UAF Master Student Kovalscik will travel to the Alaska Marine Science Symposium in Anchorage in January 2023. Travel costs include round trip airfare from Fairbanks to Anchorage in January at $300 based on AK Airlines, lodging for 5 nights at Hotel Captain Cook (site of conference) at $185 per night, no per diem is included.

UAF Master Student will travel to St. Paul Island three times per year to collect samples from northern fur seals and Steller sea lions. Travel costs for airfare were included at $1,600 each trip.

UAF Master Student will travel to the Society for Marine Mammalogy conference to a location as yet undetermined, costs were assumed based on costs to Palm Beach, FL (where it was held last year). Travel costs include round trip airfare from Fairbanks to Palm Beach, FL in December at $2,100 (based on AK Airlines), lodging for 5 nights for average hotel rates in Palm Beach for December at $190 per night, and per diem for 5 nights at Federal GSA rate for Palm Beach at $69 per day.

UAF Master Student will travel to the Symposium on Harmful Algae in Albany, NY. In October 2022. Travel costs include round trip airfare from Fairbanks to Albany in October at $800 (based on AK Airlines), lodging for 5 nights for average hotel rates in Albany for October at $160 per night, per diem for 5 nights at Federal GSA rate for Albany at $79 per day, rental car based on average price of car for one week in Albany.

SUPPLIES/COMMODITIES $5,725

Item	**Cost**	**Qty**	**Total**
Domoic acid kit	$550	5	$2,750
Paralytic shellfish toxin kit	$550	5	$2,750

Action packers for safe storage	$75	3	$225
Total			**$5,725**

Justification: Purchase of 5 domoic acid and paralytic shellfish toxin kits to run 100 tests. Prices for kits provided by PI Kathi Lefebvre. Purchase of three action packers for shipping samples, costs are $75 per container. Price for action packers based on 24-gallon sized containers found on Amazon.

OTHER $50,164

Description	$ Amount
UAF graduate student stipend (696 hours @ $23.50 per hour per semester x 2 semesters)	$32,712
UAF graduate student tuition (6 credits @ $729 per credit per semester x 2 semesters)	$8,748
UAF graduate student insurance ($2,966 per semester x 2 semesters)	$5,932
UAF fees ($936 per semester x 2 semesters)	$1,872
Registration for Society for Marine Mammalogy	$450
Registration for Symposium on Harmful Algae	$450
Total:	**$50,164**

Justification: UAF Master Student Chelsea Kovalscik is requesting funding for UAF stipend, tuition, and University fees. Per UAF requirements, graduate students receive 696 hours per semester of paid work at $23,50 per hour for a stipend total of $16,356 per semester or $32,712 for the year. Per UAF requirements, graduate students are required to take a minimum of 6 credits per semester at $729 per credit. The per semester tuition total is $4,374 or $8,748 for the year. Per UAF requirements, graduate students are required to have insurance through the University. The cost of insurance is $2,966 per semester or $5,932 per year. Other associated fees required by UAF come to a total of $936 per semester or $1,872 per year. All UAF fee requirements are located: https://uaf.edu/finaid/costs/ . Registration for the two conferences is based on costs from last year.

A 5% fiscal fee ($3540) from ASLC is charged for this subaward because it is outside of AOOS Core Funding, but is being requested by NOAA to add for this year for this disbursement.

Other ($100,764)

Other costs included in the AOOS operating budget include rent, insurance (other than health), telephone and utilities, memberships and dues, postage and printing, and Board and Committee travel.

Description	**$ Amount**
Rent/Parking	$52,000

Insurance	$5,000
Telephone/Internet/Refuse/ IT Support	$10,502
Memberships/Dues	$17,000
Symposiums/Conferences	$10,000
Postage/Publications/Printing	$1,000
Board & Committee Travel	$1,250
Stakeholder Conferences in Rural Communities (1 conference)	$4,012
Facility Rental for stakeholder conferences ($500 each x 1 conference)	$500
Facility Audio/Visual Support for stakeholder conferences ($100 each for 1 conference)	$100
Speaker fees for Alaska Native/community members ($175 each x 2 persons x 1 conference)	$350
Refreshments ($300 per conference x 1 conference)	$300
Stakeholder Travel (airfare and per diem/lodging for 2 people x 2 nights each x 1 conference)	$2,762
Total	**$100,764**

Justification:

Rent/Utilities/Parking ($52,000): AOOS shares office space with other lease holders, the total rent, utilities, and parking is calculated based on number of employees plus shared conference room. It is based on negotiation lease costs for 2022-2023. Half of the rent expenses in FY21 were paid by carryover funds from the previous agreement. The full year of rent expenses are included for FY22.

Insurance ($5,000): Insurance for AOOS equipment, including the wave buoys and hydroballs. Costs for insurance were not included in FY21 because they were paid from carryover of the previous agreement.

Telephone/Internet/Refuse/IT Support ($10,502): Telephone and internet services, refuse, and Information Technology support including conference call costs. It is based on costs from 2022 and estimated for 2023 from the vendors.

Memberships/Dues ($17,000): Memberships for the IOOS Association, Consortium of Ocean Leadership, and ARCUS. These costs were not included in FY21 because they were paid from carryover of the previous agreement.

Symposiums/Conferences ($10,000): Fees for AOOS staff to attend scientific conferences and support for Alaska-based conferences are included in FY22. This includes attendance and/or support of the Alaska Marine Science Symposium, Arctic Encounter, Alaska Forum on the Environment, and others. These costs were not included in FY21 because they were paid from carryover of the previous agreement.

Shipping/Postage/Publications/Printing ($1,000): Postage, publications, and printing of materials. These costs are much lower than FY21 because it included shipping of lab and sampling equipment under the HABs drawline. Costs are based on historical costs.

Board & Committee Travel ($1,250): Board & Committee travel. Travel includes airfare of $625 for 2 board members to attend one one-day meeting per year because many other board members are either located in Anchorage, AK, attend by teleconference, or cover their own costs.

Stakeholder Conferences in Rural Communities: **AOOS will hold one stakeholder conference** in remote hub communities, as yet undetermined, within Alaska to engage with Alaska Native people living in small coastal villages. The remaining stakeholder conferences will be covered under the HABs and ROP drawlines in FY22. This will help to increase awareness of ocean and coastal issues in Alaska and partner agency missions to better respond to stakeholder needs for ocean and coastal observations and information products. AOOS has incorporated Diversity, Equity, and Inclusion ideals in our stakeholder outreach activities as many of these stakeholders are Alaska Natives. In the Alaska Native culture, when tribes would gather periodically to exchange information and ideas, they would bring food from their communities to share with members from other communities as a show of good faith. This cultural tradition is integral to building the relationships necessary to engage in the fruitful exchange of ideas and the dissemination of information. The exact location of these conferences has yet to be determined and may have to be changed due to extreme and unpredictable weather conditions for travel in Alaska. Due to these extremely remote locations, catering services are typically not available so alternative methods of providing food at meetings will need to be employed and may consist of purchasing locally available supplies, shipping food items from larger communities, and/or employing other local providers. When appropriate, the per diem provided for attending participants and staff will be reduced by the meal provided at the meeting. Expenses for this conference include facility rental, audio/visual (A/V) support, speaker fees, refreshments (see text above), airfare, lodging, and per diem.

- *Facility Rental ($500):* Facility rental assuming $500 each conference (based on historical costs). One conference is included in this core funding.
- *Facility A/V Support ($100):* For A/V support at the facility assuming $100 each conference (based on historical costs). One conference is included in this core funding.
- *Speaker Fees ($350):* Fees for Alaska Native/community members assuming $175 for each speaker, assuming 2 speakers per conference (based on previous experience with Alaska Native outreach). One conference is included in this core funding.
- *Refreshments ($300)*: As noted previously, we assume $300 costs of light refreshments and food sharing at each conference. One conference is included in this core funding.
- *Airfare ($1,626)*: We assume airfare costs between villages are approximately $813 based on average costs of flights on Alaska air carriers (Alaska Airlines, Bering Air, Wright Air, and Ravn Alaska). We assume 2 people will travel from a community to the conference location. One conference is included in this core funding.

- *Lodging/Per Diem ($1,136)*: Using GSA lodging/per diem rates for travel to a representative village (Wainwright), the full rate is $284. We assume 2 people for 2 nights for each conference. One conference is included in this core funding.

Stakeholder Travel Summary (one conference)	**per trip**	**1 trip total**
2 round trips x 2 persons for 1 conference @ $813 airfare	$813	$1,626
Per diem/lodging for 2 persons x 2 nights for 1 conference @ $284 GSA rate	$284	$1,136
Total		**$4,012**

TOTAL DIRECT CHARGES

a) Personnel	$398,263
b) Fringe Benefits	$111,513
c) Travel and Per Diem	$7,476
d) Equipment/Software	$14,997
e) Supplies/Commodities/Equipment	$3,797
f) Contracts/Services	$765,867
g) Other	$1,421,571
Total Direct Costs	**$2,723,484**

INDIRECT CHARGES

AOOS does not charge indirect expenses due to the nature of the organization. AOOS is primarily funded by the IOOS Program and all financial administrative duties are fulfilled by a contractual agreement between AOOS and ASLC.