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Memorandum 22-071

TO: Rob Dumouchel, City Manager

FROM: Janette Keiser, Director of Public Works

DATE: April 12, 2022

SUBJECT: Contract to National Kachemak Bay Estuarine Research Reserve

Issue: The purpose is to request approval to issue a Contract to the Kachemak Bay National Estuarine Research Reserve ("KBNERR") to do ground water research in the Bridge Creek Reservoir watershed.

Background:

Ordinance 21-16(A) authorized the expenditure of \$50,000 from the HAWSP Fund for ground water research in the Bridge Creek Reservoir Watershed. KBNERR has been conducting ground water research in a wide area north of the Bridge Creek Reservoir. KBNERR proposes to extend that work south to the Bridge Creek Watershed for \$50,000. To quote KBNERR, where's what they intend to do:

We propose to identify priority areas where springs, seeps, and their associated recharge areas are located. The identification of these areas will be a combination of geospatial analysis and field verification. The new geospatial modeling will predict locations of groundwater recharge next to seeps and springs in the Bridge Creek Reservoir watershed, which will be field validated.

Field work will be performed June 2022. Edgar Guerron Orejuela from the University of South Florida and a NOAA Ernest F. Hollings scholar, will focus on developing and field validating the layer that predicts the locations of groundwater recharge proximal to known seeps and springs in the Bridge Creek Reservoir watershed. Later, Dr. Mark Rains, Dr. Kai Rains, Tyelyn Brigino of the University of South Florida, and another NOAA Ernest F. Hollings scholar, will further field validate the layer that predicts the locations of additional seeps and springs. Onsite technical and logistical support will be provided by KBNERR staff. We request that the City of Homer facilitate physical access to areas within the project domain.

Deliverables will include an updated geospatial database and a virtual workshop focused on the identification of areas where the City of Homer might want to consider practicing source-water protection, to ensure lasting groundwater discharge to the Bridge Creek Reservoir.

Recommendation:

City Council pass a resolution awarding a Contract to KBNERR in the amount of \$50,000 and authorizing the City Manager to negotiate and execute the appropriate documents.