

# **Mono County Water Transfer Criteria for the Restoration of Walker Lake**

## **Background**

Walker Lake is an environmentally degraded terminal lake in Mineral County, Nevada, spanning 50 square miles at the terminus of the Walker River which begins in the Sierra Nevada Mountains and runs through Antelope Valley and Bridgeport Valley (for a map, see <https://webapps.usgs.gov/walkerbasinhydromapper/#home>). During the last half of the 19th century, farmers and ranchers established communities in the Walker Basin and natural flows from the Walker River were diverted to support hay, pasture and other irrigated crops. In addition, the river and lake are sacred to the Walker River Paiute Tribe, and the Tribe has used river water for agriculture and other purposes. As a result of declining water levels, the salinity of Walker Lake increased dramatically to the point that the general health of the ecosystem is at risk and the lake can no longer support native fish and wildlife populations.

In 2009, the Walker Basin Restoration Program (WBRP) was established by Public Law 111-85 for the primary purpose of restoring and maintaining Walker Lake. The program is funded by the Desert Terminal Lakes (DTL) Fund which Congress established for the benefit of at-risk natural desert terminal lakes and associated riparian and watershed resources. The program authorizes the purchase of water rights to maintain in-stream flows that would increase water levels in Walker Lake.

In 2012, the National Fish and Wildlife Foundation (NFWF), which was initially charged with managing the program and DTL Fund, and Mono County entered a Memorandum of Understanding (MOU) in response to concerns about the impacts in Mono County of potential water lease or sale programs dedicated to raising the level of Walker Lake (see Appendix 1). The MOU established that the Mono County Board of Supervisors would review, comment upon, and consider approving a proposal for water transactions prior to NFWF's appropriation of any funds for the lease or purchase of land, water appurtenant to the land, or related interests for Walker Lake restoration.

In 2014, a feasibility study was conducted by the Resource Conservation District of Mono County (RCD) that sought to assess the impacts of potential water transactions under the WBRP and to answer a series of hydrologic, ecologic, and economic questions that would provide a framework for future County water transfer policies and inform more detailed study.

In 2015, NFWF awarded a grant to Mono County to develop a water lease or transfer program proposal and conduct environmental review under CEQA. The project had various starts and stops related to grant scope changes, staffing challenges, and interruption by COVID, but ultimately an administrative draft of the program and Environmental Impact Report (EIR) was available with contract staff secured to complete the project. Unfortunately, the funding was no

longer available through NFWF and therefore that version of the project was not completed. However, the MOU provisions remain in place.

Concurrently in 2014/2015, the Walker Basin Conservancy (WBC; <https://www.walkerbasin.org/>) was established to lead the effort to restore Walker Lake. The WBC works to restore and maintain Walker Lake while protecting agricultural, environmental, and recreational interests throughout the Walker Basin, and has entered into water transfer agreements involving water rights outside of Mono County that include management of the associated resources and economic impacts. Since assuming full responsibility for implementing the WBRP, WBC has worked with more than 155 ranchers and farmers in Nevada to increase streamflow in the Walker River while protecting agriculture, opened more than 29 miles of the Walker River to public access, and acquired more than 26,000 acre-feet of water for environmental benefit.

Over the past decade, the Conservancy has developed guiding principles for long-term water transfers, including:

- a. Develop long-term land use plans.
- b. Sustain the local agricultural economy.
- c. Protect groundwater by i) reducing groundwater withdrawals when possible, and ii) protecting groundwater recharge.
- d. Prioritize acquiring land with significant conservation value.
- e. Prioritize acquiring land with recreation opportunities.
- f. Work with willing sellers at market value.
- g. Prevent potential conflicts with other surface water users.
- h. Support tribal priorities.
- i. Support local objectives with land acquisition.
- j. Protect wildlife and plants.
- k. Address risk of subdivision.
- l. Continue to pay water assessments and fees in perpetuity.

The WBC now wishes to engage in the same or similar types of water transactions within Mono County.

## **Objectives**

The objectives of the Mono County Water Transaction Criteria are as follows:

1. To inform the State Water Resources Control Board's (SWRCB's) consideration of environmental impacts under the California Environmental Quality Act (CEQA) that may result from water transactions in Mono County.
2. To support the voluntary participation of Mono County private property owners and water rights holders in a water transaction program consistent with the purposes and objectives of the WBRP.

3. To ensure water transactions under WBRP in Mono County are consistent with Mono County General Plan Conservation and Open Space Element Objectives.
4. To satisfy the requirement of the 2012 MOU between NFWF and Mono County that Mono County input into any Mono County water transaction program utilizing DTL funds.

### **Antelope Valley**

Antelope Valley encompasses 31,925 acres at the northern end of the County and includes the communities of Walker, Coleville, and Topaz, the Marine housing complex at Coleville, and Camp Antelope at Walker (see Figure 1). The West Walker River flows through Antelope Valley to Topaz Lake Reservoir, a manmade reservoir straddling the California–Nevada state line. The river is diverted for irrigation of agricultural land throughout the valley. Grazing is the primary agricultural use in the valley followed by alfalfa production.

The topography of Antelope Valley is characterized by the relatively flat valley floor, gently sloping alluvial fans along the valley margin, and steep slopes above the alluvial fans. The elevation of Antelope Valley ranges from approximately 5,400 feet above mean sea level (amsl) in the Town of Walker to 5,000 feet amsl at Topaz Lake. Vegetation in the area is primarily irrigated agricultural land on the valley floor, riparian scrub along the West Walker River, and sagebrush scrub in unirrigated areas and on the slopes surrounding the valley floor.

Waterbodies in the project area include Topaz Lake Reservoir, West Walker River, Nevada Creek, California Creek, Slinkard Creek, and Mill Creek (Mono County, 2008).

The Antelope Valley is located within the West Walker River watershed. The West Walker River and its main tributaries (Little West Walker, West Fork, West Walker River, and Leavitt Creek) flow freely from the crest of the Sierra Nevada Mountains to the town of Walker, at the northeastern head of Antelope Valley. Near the town of Walker, much of the Walker River is diverted into ditches to provide irrigation water for pastureland and alfalfa production in Antelope Valley. Eleven miles of the West Walker River are affected by these diversions, which greatly slows the flow of the river during irrigation season. The West Walker River provides more than 60 percent of the available water in the entire Walker River system.

### **Bridgeport Valley**

Bridgeport Valley is located at the eastern base of the Sierra Nevada Mountains south of the California–Nevada state line and north of Mono Lake in northern Mono County (see Figure 1). Elevations within Bridgeport Valley range from approximately 7,100 feet amsl at the southern edge of the valley to 6,460 feet amsl at Bridgeport Reservoir. Water drains in a northerly direction through the valley toward Bridgeport Reservoir. The East Walker River flows along the western side of Bridgeport Valley and is the confluence of many streams draining the eastern slopes of the Sierra Nevada Mountains. The East Walker River is the only stream exiting the valley and eventually joins the West Walker River near the town of Yerington, Nevada before draining into Walker Lake (SWRCB, 2004). Bridgeport Valley and surrounding meadows are exclusively used as grazing pasture.

# Project Area

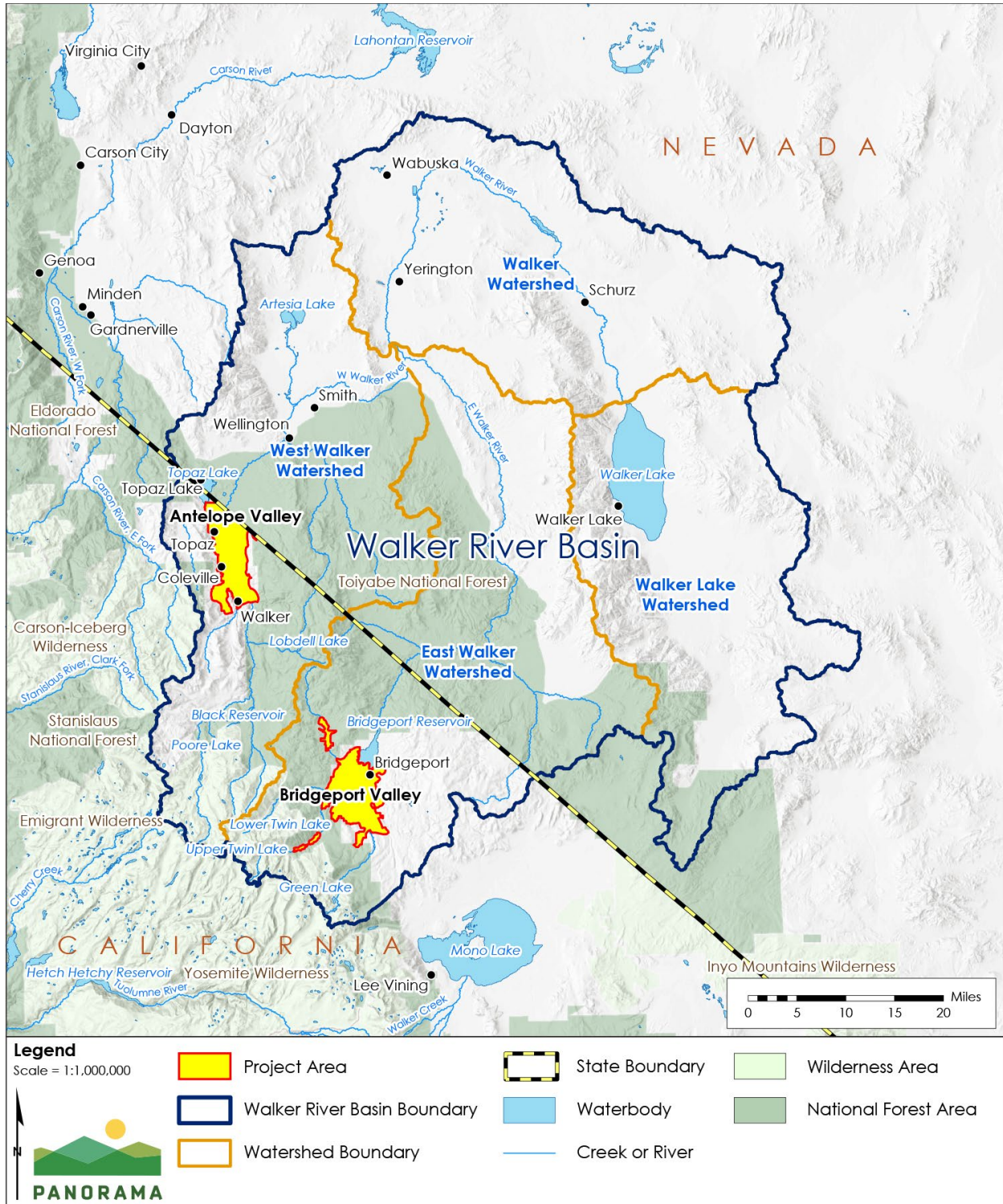


Figure 1. Project Area.

## **Mono County Authority**

The State Water Resources Control Board (SWRCB) has exclusive authority to issue and administer water right permits and licenses for surface water appropriations. The guidelines and any analysis set forth herein are provided for informational purposes only and intended for consideration by the SWRCB when conducting environmental review on any subsequent WBRP water transfers in the County. The proposed guidelines would neither permit nor prohibit any future water right transaction and do not conflict with SWRCB's authority. Rather, the guidelines have been designed to avoid or mitigate potentially significant impacts of subsequent WBRP water transactions in the County as described in environmental analyses (see appendices) based on existing data.

The County intends to adopt the Guidelines into the Mono County General Plan. Prior to approving or denying any permit for water rights under the WBRP within the County, the SWRCB would need to analyze the environmental effects of each water transfer in compliance with CEQA and evaluate potential conflicts with the County's General Plan policies, which are intended to mitigate environmental effects, unless the project were exempt from CEQA (including a water transfer of 1 year or less). Once the proposed policies are adopted by the County, the SWRCB would need to consider whether a proposed project is consistent with the policies.

## **California Environmental Quality Act (CEQA) Compliance**

As lead agency, the SWRCB will have responsibility for compliance with CEQA for any water transfer project. Mono County and concerned citizens will review, comment on, and potentially protest or take other action with respect to water transactions proposed for approval by the SWRCB to ensure potential negative environmental impacts have been addressed. The intent of Mono County's proposed General Plan policies and environmental analysis (Appendix 2 and 3) is to provide a framework and analysis with which water transfer projects may adhere in order to largely address environmental concerns. Should a project not be consistent with this framework, additional environmental analysis may be necessary to ensure potentially significant impacts are mitigated prior to SWRCB approval. In other words, compliance with the proposed General Plan policies would be expected to avoid or mitigate environmental effects of a water transaction program in Mono County and may avoid the need for further environmental review under CEQA.

## **Types of Water Transfers & Impacts of Concern**

The County recognizes a variety of water transfer transactions by WBC as part of the WBRP are possible, including the following:

- Long-term leasing (two or more years) and/or permanent transfer or in-stream dedication of decreed or storage rights,
- Temporary lease of decreed flow rights and storage rights (less than two years at a time),
- Land may or may not be transferred with the water transfer scenario.

The County's criteria does not define or limit the types of permissible water transactions. However, if the project is not consistent with County criteria, potentially significant and unavoidable environmental impacts may occur and the County may therefore oppose or challenge the proposed water transfer within the limits of its authority.

Based on the review of baseline information, agency and community outreach, and additional research and analysis, the following listed resources and topics are not likely to be impacted or will have a less than significant impact based on assumed project parameters. See Appendix 2 for a discussion of the outreach and the following environmental topics:

- Aesthetics
- Air Quality
- Cultural Resources
- Energy
- Forestry Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Land Use and Planning
- Hazards and Hazardous Materials
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Although less than significant impacts were ultimately identified for the above topics, the initial study (Appendix 4) did indicate the potential for significant impacts in the following areas, but ultimately found them to be less than significant based on the following assumptions:

- **Aesthetics:** The determination is based on the assumption that the water transfer would not include new structures or features being introduced, and fallowed agricultural lands transitioning to drier vegetation types but not being denuded. The drier vegetation types are assumed not to exceed 3,290 acres (8%) of current agricultural lands.
- **Air Quality:** The determination is based on the assumption that the water transfer would not use of equipment that would generate air emissions, and that the project includes native revegetation with active restoration for a period of at least two years, which would retain vegetation cover and prevent potential fugitive dust.
- **Land Use and Planning:** Consistency with the County's General Plan policies and the associated environmental analysis, including any proposed project policies and amendments adopted by the County, avoids conflicts with the County land use plan and results in a less than significant impact.
- **Public Services:** Further analysis indicated impacts would be less than significant as no new services would be required, and no need to relocate or construct any facilities.
- **Tribal Cultural Resources:** Invitations for tribal consultation were sent pursuant to AB 52, and the Washoe Tribe of Nevada and California, and the Mono Lake Kutzadika Tribe requested consultation. No potential impacts to tribal cultural resources were discovered through the AB 52 consultation process.

- **Mandatory Findings of Significance:** Impacts to plant and animal populations are evaluated under Biological Resources. The cumulative impacts analysis will depend upon reasonably foreseeable projects at the time a water transfer is proposed, and will therefore need to be considered by the SWRCB at that time. No substantial adverse affects on human beings were identified.

In addition, the following information should be noted:

- **Greenhouse Gas Emissions:** The analysis assumes an initial, one-time loss of sequestered carbon due to the drying of irrigation-induced and/or natural wetlands, but finds the impact to be less than significant because the site would then continue to maintain vegetation and not release further greenhouse gas emissions.
- **Wildfire:** The determination is based on the assumption that the transition to drier vegetation types would be limited to 3,290 acres (8%) of scattered agricultural lands, which is a marginal increase and not expected to increase the number and severity of wildland fires.

The topics that ultimately warranted a complete environmental analysis due to the potential for significant impacts include water resources, biological resources, agriculture, and recreation. Appendix 3 contains the County's analysis of these topics, originally conducted as an environmental analysis under CEQA, which resulted in the criteria below. Therefore, compliance with the criteria below substantially addresses the environmental concerns identified in this analysis.

## Water Transaction Criteria

Goal 1. Develop long-term land use plans: For each water transfer funded by the Desert Terminal Lakes Fund, or similar/equivalent funding, for the restoration of Walker Lake, the proponent(s) shall develop an adaptive management plan that sets forth conservation criteria and mitigation measures to reduce impacts, which will be in force and effect as long as the transfer exists. Where land is not part of the transaction, the property owner of the land, or another party with applicable authority, is responsible for an adaptive management plan covering the applicable policies.

Policy 1.1. The plan shall be consistent with General Plan goals and objectives, and shall include the following:

- a. Baseline assessment of resources,
- b. Measures to avoid or mitigate significant environmental or economic impacts, if applicable,
- c. Monitoring criteria, and
- d. Adaptive management measures to address negative impacts and ensure compliance with the listed policies and the Mono County General Plan.

- e. Where the land is not part of the transaction and the property owner or a third party is responsible for compliance with the applicable General Plan policies, the Walker Basin Conservancy (or entity receiving the water transfer) is responsible for monitoring implementation and reporting conditions on an annual basis to the Mono County Community Development Department. Monitoring may be completed by a qualified third party or contractor.

Policy 1.2. Protect water resources and mitigate impacts to a less than significant level by ensuring that:

- a. No water transfer project, as approved, will permit groundwater substitution to replace transferred surface water uses, including for the maintenance of baseline conditions.
- b. The water transfer project will not permit removal of vegetation cover to prevent water quality impacts such as siltation and erosion on properties acquired through the program.

Policy 1.3. Protect biological resources and mitigate impacts to a less than significant level by incorporating the following into any water transfer project:

- a. Does not permit a net loss of wetlands.
- b. Does not permit significant loss of habitat for sensitive species.
- c. Does not permit the loss of more than 20% of existing native vegetation cover.
- d. Long-term management/removal of invasive weeds to prevent exceedance of baseline.
- e. Conduct comprehensive floristic surveys for special-status and sensitive plants and sensitive vegetation communities within the subject land.
  - o A monitoring and management plan would be implemented and CDFW would be consulted for any special-status plant species or sensitive communities that may be adversely impacted by the proposed project with a minimum 1:1 mitigation ratio for plant species. The plan would minimize the loss of species/communities and, where necessary, restore or replace species/communities with a site of equivalent value. The Plan would include maps; a schedule and protocols for monitoring the special-status plant species/sensitive community; and mitigation options including but not limited to, restoration of adjacent areas where the species/community is present and/or establishment of the species/community in a new area, retaining irrigation to the sensitive communities, weed abatement, paying the cost for acquisition and long-term management and protection through a conservation easement, or other means as appropriate
- f. During the mountain whitefish breeding season, releases of water from controlled reservoirs under the Walker Basin Water Transaction Program, including release of storage rights from Topaz Reservoir, Twin Lakes, and/or Bridgeport Reservoir, should be gradually ramped up to a level where the West



and/or East forks of the Walker River experience increased flow levels for at least two weeks to prevent impacts to mountain whitefish.

- g. Storage release flows in the West and East forks of the Walker River should not increase above the mean monthly flow for wet years during the mountain whitefish breeding season to avoid significant impacts.

Policy 1.4. Protect recreation resources and mitigate impacts to a less than significant level by incorporating the following into any applicable water transfer project:

- a. Develop baseline data on river and reservoir water level below which 1) recreation facilities such as a boat launch were not available, and 2) fish health and survival were affected due to impacts to water temperature and dissolved oxygen levels. Incorporate monitoring protocols to ensure the sale of storage water rights maintains water levels above these thresholds.

Policy 1.5. Protect agricultural resources and mitigate impacts to a less than significant level by incorporating the following into any water transfer project:

- a. No transfer of water from lands bound by a Williamson Act contract if the transfer would result in a material breach of the contract, unless the contract is cancelled by the Mono County Board of Supervisors, which is subject to state law (Government Code Section 51282).
- b. An agricultural or open space conservation easement or similar deed restrictions over properties subject to water transfer should be recorded. In the absence of a recorded easement, the project must sustain, or at a minimum not be detrimental to, the local agricultural economy character of the region, which must be evaluated prior to the acquisition.

Policy 1.6. Protect tribal cultural resources and mitigate impacts to a less than significant level by incorporating the following into any water transfer project:

- a. The project supports, or at least is not detrimental to, applicable Tribal priorities.
- b. State law requirements for tribal consultation are followed, and tribal consultation requests are honored in good faith.

Policy 1.7. Prevent cumulative impacts and impacts to multiple resources by addressing the risk of subdivision, potentially through the recording of deed restrictions preventing subdivision and/or requiring long-term maintenance of the real estate for the purposes of the program (agriculture, environmental conservation, recreation).

- a. Residential subdivision may be appropriate if the parcel meets the following criteria consistent with the Mono County General Plan Land Use Element (see Objective 1.A. policies 1.A.1 and 1.A.2.):
  - Encourage infill development in existing communities and subdivisions. New residential subdivision should occur within or immediately adjacent to existing community areas. The policies regarding new residential

development outside existing community areas does not apply to water transfer situations.

- New residential development for permanent year-round residents should be concentrated in existing community areas.
  - Require that necessary services and facilities, including utility lines, are available or will be provided as a condition of approval for proposed projects.
  - Require that new development projects adjacent to existing communities be annexed into existing service districts, where feasible.
- b. CEQA analysis for subdivisions resulting from water transfers have not been evaluated by the County and would be subject to additional CEQA review.

Policy 1.8. Adhere, at a minimum, to the “Walker Basin Conservancy Guiding Principles for Transactions,” dated August 22, 2023 (see Appendix 5), as may be updated from time to time.

Goal 2. Collaborate with the Walker Basin Conservancy, or equivalent organization receiving water rights to restore Walker Lake, on the WBRP and management of water transfer impacts in Mono County.

Policy 2.1. In the spirit of Policy 1.8.i., the Walker Basin Conservancy (or equivalent) should take into consideration local input, concerns, conflict, controversy, support, and other relevant matters when developing, pursuing, and implementing water transaction projects.

Policy 2.2. The WBC (or equivalent) should annually report to the Mono County Board of Supervisors, Antelope Valley Regional Planning Advisory Committee (RPAC), and Bridgeport Valley RPAC on water transactions including, but not limited to, the following:

- The amount and type of water transactions, management of the agricultural and environmental resources associated with water transactions, the status of Walker Lake, and other relevant information.
- Receive input, concerns, and issues from local communities and the Board, and commit to steps to addressing valid information raised.

Policy 2.3. The WBC (or equivalent) will provide to the Mono County Community Development Department an annual monitoring report on implementation of adaptive management plans where the land was not transferred with the water as required by Policy 1.1.e.