



## DESERT INDOORS®

### Environmental Education Activities for Students at Home

(This activity was created in accordance with shelter-in-place. Remember to practice social distancing and stay local.)

#### Module: *Become a Land Manager!*

**Topic:** Land conservation and management

**Objective/Learning Goal:** Children will learn about conservation land management and the challenges that two government agencies face. They will explore the impacts that resource extraction, usage, and urban sprawl have on the desert.

#### Glossary:

- **Bureau of Land Management (BLM)** - The Bureau of Land Management's mission is to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.
- **Ecosystem Management** - Decisions or actions of stakeholders (individuals, organizations, and government agencies) related to maintaining environmental life for current and future usage.
- **National Parks Service (NPS)** - The National Park Service's mission is to preserve unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.
- **Resource Extraction** - Activities that involve withdrawing materials from the natural environment. Mining is one example of resource extraction.
- **Resource Goods** - Materials produced by natural systems that are essential to human life, economies, and culture. (Ex. food, wood).
- **Stakeholders** - Individuals, organizations and governmental agencies who have an interest in an area or decisions regarding use of that area.

**Materials:** NPS Map and BLM Infographic (attached), pencils, pens, and other coloring implements, paper.

**Build/Check Background Knowledge:** Ask your children what they already know about the *Bureau of Land Management* (BLM). What do they know about the *National Park Service* (NPS)? Have they ever visited a national park or BLM land? What does the term “national public land” mean to them?

Introduce the mission statements of both these federal agencies. Noting that the BLM states “productivity,” meaning that the agency is tasked with managing multiple uses on public lands while the NPS states “preserve unimpaired” meaning that this agency is tasked with protecting public lands.

Historically since 1916, the National Park Service has been trusted with preserving lands. Currently, there are 419 units covering 85 million acres managed by the park service. The BLM was established in 1946, though public land management began during westward expansion (*manifest destiny*) in the early 1800s. The BLM currently manages 245 million surface acres and 700 million subsurface (mineral) acres.

Review each of the attachments and familiarize yourself with land use. In 2018 there were 2,942,382 visitors at Joshua Tree National Park, an increase of 3.11% from the previous year. The Mojave National Preserve hosted 787,404 visitors an increase of 9.88%. The California BLM saw an increase of 1.2% in recreation visitors for a total of 11,242. With that many visitors it can sometimes be challenging to manage and protect land while still providing the opportunities to get outdoors.

Public land management requires input from all concerned parties, the *stakeholders*. These stakeholders include the federal and local government, organizations, private individuals, and concerned groups.

With all that public land comes a variety of management challenges. Through the activities below, students will become familiar with some of the challenges faced by these two agencies.

**Indoor Activity:**

1. Students can research and learn more about *ecosystem management* concerns and challenges faced by government agencies by visiting <https://www.doi.gov/>
2. After doing research, task children to think critically about different types of public land use.
  - Do they use a cellphone? Do they use a computer? The minerals and metals in those devices must be extracted.
  - They must eat and drink water. Where does their clean water and food come from?
  - They need shelter. Where does the wood used in construction come from?

How would they balance the needs to extract the *resource goods* listed above, with our growing population and conserving land? What kinds of protections would they put into place to conserve our plant and wildlife species?

3. Have your child draw or write about the public lands that are special to them.
  - Have them express why this place is special? How they would you feel if this special place became used for something else and became messed up because of alternative use? Would you want to visit that public space again? What would you do to help make sure that area stays the way you liked it? What can groups/stakeholders do to protect that land? What would you suggest and, how will this help other people in the community?

***We would love to hear how your project went and to have you share your findings as scientists?***