ENST 489/595 – Environmental Justice Issues and Solutions  
Tu/Th 3:30 - 4:50 PM / PAYNE FAMILY NATIVE AMERICAN CENTER, RM. 103  
Fall 2018

Instructor

Dr. Robin Saha  
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Office Hours: Wed. 10:30-Noon, Thurs. 12:20-1:50 pm, or by appt.  
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Phone: 243-6285

Course Description

In this co-convened undergraduate (489) and graduate (595) course, we explore how and why environmental risks, such as exposure to toxic chemicals - and benefits, such as access to natural resources, environmental amenities, and environmental protection - are inequitably distributed among various segments of society. The premise of this course is that socially, economically, and environmentally sustainable societies at the local, national, and global levels cannot be achieved unless the underlying causes of environmental and social inequity are understood and addressed.

Thus, in the first part of the course we look at the historical, sociocultural, political, and economic processes by which environmental inequities by race, socioeconomic status, and gender are believed to have arisen and continue to persist. We do so largely by examining various case examples and different manifestations of environmental injustice, including those facing indigenous peoples.

In the latter part of the course, we will use our understanding of the causes to consider environmental justice solutions. We will focus on governmental and industry responses to environmental justice issues. We will look at strategies and tools that disproportionately affected communities and their allies are using to empower themselves and work toward a more just, fair and sustainable society. We also will critique efforts of environmental justice organizations, government, industry, and yes, even universities and traditional environmental organizations. We will also explore our own places and roles in the movement and within segments of society seeking broader social justice and social change.

Course Objectives and Learning Outcomes

This course seeks to develop students’ understanding of myriad causes of environmental inequality and apply those understandings to critique existing solutions to environmental inequality and propose new solutions.

By the end of the course students will:

- be able to identify examples of environmental injustice in various contexts.  
- understand and apply various environmental justice concepts;  
- understand key analytic issues regarding evidence of environmental injustice;  
- understand the range of explanations for environmental inequality;  
- understand the unique aspects of environmental justices that relate to Native Americans;  
- have a better understanding of their own social background and environmental influences, places within the environmental justice movement and desirable roles in social change;
• understand and appreciate the role of grassroots environmental justice groups in societal responses to environmental injustice, including the role of local EJ groups;
• be able to assess the effectiveness of existing approaches for addressing environmental injustice;
• be able to propose appropriate solutions that individuals, communities, government, industry, and the environmental community can use to address environmental justice problems; and
• conduct environmental justice analyses that demonstrate an in-depth understanding of a particular environmental justice case, topic, or issue.

Class

The class format will be a mix of lecture, discussion, short films, guest speakers, small group activities and student presentations. There also will be two days of training held in a computer classroom covering how to obtain and use demographic data and information on pollution sources and toxic chemicals. The last several classes will be devoted to graduate student term paper presentations.

A Note on Email Communication: In accordance with privacy laws the University requires me to communicate with students about academic matters through students’ University email (UMConnect) account. Although efforts will be made to limit emails, occasionally it is necessary to communicate with the class. Thus, please regularly check your UM email account for this class.

A Note about Obtaining Assistance: If you need assistance outside of class understanding course materials or with assignments, please come see me during office hours (or by appointment if meeting during office hours is not possible). I pride myself on being readily available for extra help.

Field Trip

There will be a full-day field trip on Tuesday, October 9, to Superfund sites in Butte and Anaconda. Further detailed will be provided in class. All students are expected to attend the field trip and should make necessary arrangements with their other instructors, employers, families, etc.

Description of Main Assignments

All assignments should be typed, double-spaced and use 11- or 12-point font and one-inch or one-and-a-quarter inch page margins. Unless otherwise instructed, all assignments should be submitted through the Moodle course webpage (use your UM NetID Login at http://umonline.umt.edu/).

Flint Water Crisis Case Study Analysis: For this assignment, students will analyze the Flint Michigan water crisis using an EJ lens, the assigned book (The Poisoned City) and other course materials, in doing so, you will be asked to describe what forms of environmental injustice you think are evident in the case and explain why, for example, by providing specific examples, evidence and explanations. Case study analyses should be no more than five pages for undergraduates and no more than seven pages for graduate students. This assignment is due Thurs., September 27.

Social History Reflection Essay (UNDERGRADUATES ONLY): For this assignment, you will be asked to use definitions of social class and concepts of race and ethnicity presented in the class, as well as Census and environmental data from EPA’s EJ Screen on the neighborhood or community you grew up in, to develop a social and environmental history of your life. We will have special workshops to train you up on accessing Census data and using EJ Screen. You will be asked to combine that information with your

1 Other assignments not described below include an EJ Movement Homework and a Field Trip Reaction Paper.
personal reflections about how your background and experience of the place where you grew up shaped your outlook on life, your awareness of and interactions with diverse others, and your experiences of and attitudes toward the environment. Essays should be about 5-6 pages without figures and tables. Essays are due Thursday, November 8.

**Take-Home Final Exam (UNDERGRADUATES ONLY)**: Undergraduate students will have a take-home final exam that will be handed out two to three weeks before it is due. It will consist of several essay questions covering a wide range of topics covered in the class. You are expected to be able to use and synthesize information from various sources, including course readings, lectures, the field trip, your social history essay, and guest speakers, as well critically analyze various EJ cases that we covered in the class. There may be a limited set of readings on a special case that you will be expected to use. You may be asked to demonstrate the ability to apply EJ concepts, assessment methods, and explanations to the case (much like the mini case study assignment). You will also be asked to critique EJ solutions, offer well-justified solutions to specific EJ problems. There will also be opportunity to explore and express your own views and ideas about environmental justice, social justice and sustainability. Total length of the final exam is not to exceed 12 pages. Students may be asked to contribute questions for the final exam throughout the semester. The Final exams is due Friday, December 14.

**Term Papers/Case Studies and Presentations (GRADUATE STUDENTS ONLY)**: Graduate students will do a traditional term paper by researching, analyzing, and/or critiquing a current environmental justice case (referred to as a case study below), issue, topic, or an approach to addressing EJ problems. Topics might include grassroots community organizing; cross-class or cross-cultural alliance building; other types of collaboratives such as good neighborhood agreements and federal/state-tribal co-management; indigenous rights; traditional ecological knowledge; biopiracy and tribal intellectual property rights; EJ policies; toxics reform; community-based research; citizen science or popular epidemiology; climate justice; clean production/green chemistry; corporate social and environmental responsibility; shareholder activism; the precautionary principle; environmental human rights; EJ networks; collaboration; sustainable economic development; etc.

Graduate term papers and case studies should have both research and analysis components and a discussion of EJ solutions. They will be developed in consultation with the instructor and require a number of separate assignments including a: (1) Proposal; (2) Draft; (3) Peer Review; (4) Review Response; (5) Final Term Paper or Case Study; and (6) In-Class Presentation. These separate assignments are described below though specific guidelines will also be handed out and posted on Moodle. See below for a schedule of these assignments.

1. **Proposals.** An approximately five-page proposal with at least 15 references should describe the case, topic, or issue to be researched, provide important background, explain how and why the case, topic or issue concerns environmental (in)justice, summarize information already gathered, and describe further research and analysis to be conducted, including some of the main information sources to be used. Case study proposals should include a list of stakeholders to potentially interview and draft interview questions. In addition, for research paper proposals, please describe the main research questions and purposes or objectives of the research; provide an outline and brief description of main topics and subtopics to be discussed; and describe your interest in the topic. You may be asked to informally present your topic/proposal to the class.

2. **Drafts:** Rough drafts should include a brief introduction to the topic, a statement of the research question and/or the purpose and goals of the research, appropriate background, an in-depth EJ

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2 In place of the final exam, I may offer optional EJ applied research projects that groups of students can participate in throughout the semester, which will require meeting outside of class. Project topics will be distributed during the week of September 24th or sooner.
analysis, an appropriately formatted and complete reference list, and a short description of additional work to be done. It is expected that draft will demonstrate significant progress in researching and analyzing the topic, issue or case.

(3) **Peer Reviews:** Each graduate student will read and offer a constructive written review of another student’s draft term paper or draft case study.

(4) **Review Responses:** In true collegial form, you will give a written response to your reviewer.

(5) **Final Terms Papers & Case Studies:** Include revisions to your draft that incorporate feedback from the instructor, your peer reviewer, and any additional information obtained. Terms papers and case studies should suggest policy, organizing, or other solutions to the issue or problem, and include a feasibility analysis, that is, a discussion of the practicality of achieving various solutions, including necessary steps, potential obstacles and way of overcoming them. Graduate student term papers and case studies should be about 20-25 pages, not including references and appendices.

(6) **In-Class Presentations:** Presentations are scheduled for the last several class sessions including one during Finals Week. Presentation guidelines and a schedule for presentations will be handout out in class.

In order to carry out their research, graduate students are encouraged to participate in workshops offered as part of the Mansfield Library Workshop Series (especially the workshop on literature reviews).

**Note on the Graduate Students Increment:** In addition to doing a term paper (instead of a take-home final exam), graduate students are required to meet several times for discussions outside of class. Graduate student work is expected to demonstrate relatively more thorough research and in-depth analysis and insight especially regarding applying environmental justice concepts and theoretical explanations cover in this class.

**Extra Credit**

A few extra credit opportunities – typically service learning – that relate directly to the course will be provided. To receive extra credit students must submit a short paper describing the activities performed or event attended and relating it to the course content.

**Schedule of Assignments**

Assignments are due before class on the due date listed below.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>EJ Movement Homework (all)</td>
<td>Thurs. 9/6</td>
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<tr>
<td>Flint Case Study Analysis (all)</td>
<td>Friday 9/28</td>
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<tr>
<td>Field Trip Reaction Paper (all)</td>
<td>Thurs. 10/11</td>
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<tr>
<td>Graduate Term Paper/Case Study Proposals</td>
<td>Thurs. 10/18</td>
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<tr>
<td>Social History Reflection Essays (undergrads)</td>
<td>Thurs. 11/8</td>
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<tr>
<td>Term Paper/Case Study Drafts (graduate)</td>
<td>Tues. 11/20</td>
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<td>Term Paper/Case Study Peers Reviews (graduate)</td>
<td>Thurs. 11/29</td>
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<td>Peer Review Responses (graduate)</td>
<td>Tues. 12/4</td>
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<tr>
<td>Graduate Term Paper/Case Study Presentations</td>
<td>Thurs. 12/6 and Mon. 12/10</td>
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<tr>
<td>Graduate Term Papers/Case Studies (written)</td>
<td>Wed. 12/12</td>
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Grading and Evaluation

It is expected that all assignments will be turned in on time. The instructor reserves the right to not accept late assignments. If accepted, deductions will be made for all assignments turned in late unless you pre-arrange getting an extension before the due date.

Course grades will be based on a total of 1000 possible points allocated as indicated below.

<table>
<thead>
<tr>
<th>Undergraduates</th>
<th>Graduate Students</th>
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<tbody>
<tr>
<td>Assignment/Grade Component</td>
<td>Assignment/Grade Component</td>
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<tr>
<td>Class Participation</td>
<td>Class Participation</td>
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<tr>
<td>Pts.</td>
<td>150</td>
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<tr>
<td>Flint Case Study Analysis</td>
<td>Flint Case Study Analysis</td>
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<tr>
<td>Pts.</td>
<td>250</td>
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<tr>
<td>Field Trip Reaction Paper</td>
<td>Field Trip Reaction Paper</td>
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<tr>
<td>Pts.</td>
<td>100</td>
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<tr>
<td>Social History Essay</td>
<td>Term Paper/Case Study Proposal</td>
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<tr>
<td>Pts.</td>
<td>200</td>
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<tr>
<td>Final Exam</td>
<td>Term Paper/Case Study Rough Draft</td>
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<tr>
<td>Pts.</td>
<td>300</td>
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<td>Term Paper/Case Study Presentation</td>
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<td>Term Paper/Case Study Paper</td>
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<td>300</td>
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Attendance Policy

Regular attendance is a requirement and a significant part of your participation grade. Attendance will be taken each day in class; and it is your responsibility to sign the attendance sheet. Students who have five or more unexcused absences throughout the term may receive up to a full letter grade reduction in their course grade. Excused absences will be given on a case-by-case basis. Students wishing to have an excused absence generally must notify the instructor in advance of a class that they will miss or provide an acceptable reason such as illness or death in the family and may be required to provide verification. Repeated lateness to class and/or early departure from class is disruptive to the learning environment and may also result in a grade reduction.

Please regularly come to class on time (and don’t leave early too)! Also, please do not miss class to work on an assignment.

Policy Regarding Use of Electronic Devices in Class

Laptop computers, tablets and phones can be used only for course-related purposes and tasks approved by the instructor, such as accessing readings or taking notes. Students observed using computers or other electronic devices for unapproved purposes such as checking email will receive a C for their class participation grade and may be asked to refrain from using electronic devices for the duration of the semester. Students’ cell phones should be turned off and stored during class. Failure to do so will also adversely affect your class participation grade.

Academic Dishonesty and Plagiarism

Plagiarism is a serious violation of academic integrity. All work and ideas submitted are expected to be your own or must be fully and accurately attributed to verifiable sources. The Academic Policies and Procedures in the University Catalog states: “Students who plagiarize may fail the course and may be
remanded to Academic Court for possible suspension or expulsion.” If you have any doubts about plagiarism and citing of others’ work or ideas, especially web sources, please consult the instructor.

Students with Disabilities

If you are a student with a disability and wish to discuss reasonable accommodations for this course, contact me privately to discuss the specific modifications you wish to request. Please be advised I may request that you provide a letter from Disability Services for Students verifying your right to reasonable modifications. If you have not yet contacted Disability Services, located in Lommasson Center 154, please do so in order to verify your disability and to coordinate your reasonable modifications. For more information, visit the Disability Services website at http://www.umt.edu/dss/.

Readings

We will have one assigned book available at the UM Bookstore (or through online vendors):


We will be reading various articles, book chapters, reports and such, which most of which will be available for downloading and printing through the ENST 489/595 Moodle course webpage. See: https://moodle.umt.edu/. Some readings will be accessible directly online.

Note that graduate students are assigned extra readings most days as indicated in left margin by the following notation: GRAD.

Some adjustments to the course schedule may be needed to suit the needs of the class. These are announced in class. Students who are late, miss class, or leave early are responsible for finding out about any changes from other students or me.

Course Schedule

TUES. 8/28 – COURSE INTRODUCTION

THURS. 8/30 – INTRODUCTION TO ENVIRONMENTAL JUSTICE


TUES. 9/4 – HISTORICAL PERSPECTIVES ON THE ENVIRONMENTAL JUSTICE MOVEMENT


Bullard, Robert D., Glenn S. Johnson, Denae W. King and Angel Torres. 2014. Environmental Justice
Accomplishments and Milestones 1964-2014: A Report Prepared in Commemoration of the Twentieth Anniversary of the Environmental Justice Executive Order 12898. Barbara Jordan-Mickey Leland School of Public Affairs, Texas Southern University, Houston, TX [Read Preface and Executive Summary (p. 9-15) and sections of chapter 4 as assigned in class by last name]


THURS. 9/6 – EJ MOVEMENT ACTIVISM

EJ Movement Homework Due

TUES. 9/11 – DIMENSIONS OF ENVIRONMENTAL JUSTICE

Course Handout: Dimensions of Environmental Justice


THURS. 9/13 – ANALYZING ENVIRONMENTAL INJUSTICES – CASE STUDY APPROACHES

Read one of the following cases as assigned in class and bring printout to class:


TUES. 9/18 – FLINT WATER CRISIS

The Poisoned City [REQUIRED BOOK – READ PART I, P. 1-77]

THURS. 9/20 – FLINT WATER CRISIS (CONT.)

The Poisoned City [REQUIRED BOOK – READ PART II, P. 79-149]

TUES. 9/25 – FLINT WATER CRISIS (CONT.)

The Poisoned City [REQUIRED BOOK – READ PART III, P. 153-215]
**THURS. 9/27 – TOPIC TO BE ANNOUNCED**

Flint Case Study Analysis Due Friday 9/29 at 5 PM

**TUES. 10/2 – LEGACIES OF TOXIC CONTAMINATION IN BUTTE AND ANACONDA**


**THURS. 10/4 – RECLAMATION, REMEDIATION, AND RESTORATION IN BUTTE AND ANACONDA**

Guest Speaker(s) TBA


Additional materials may be assigned.

**TUES. 10/9 – ALL DAY FIELD TRIP TO BUTTE AND ANACONDA**

Readings /materials to be assigned.

**THURS. 10/11 – FIELD TRIP DEBRIEFING**

Field trip reaction paper due (submit through Moodle)

**TUES. 10/16 – NO CLASS**

**THURS. 10/18 – RACE AND CLASS IN AMERICA**

Graduate term paper / case study proposals due


**TUES. 10/23 – RACE AND CLASS IN AMERICA (CONT.)**


**TUES. 10/25 – CENSUS DATA GATHERING WORKSHOP – MEET IN SOCIAL SCIENCE BLDG., ROOM 258**

**TUES. 10/30 – EJ SCREEN WORKSHOP – – MEET IN SOCIAL SCIENCE BLDG., ROOM 258**

**THURS. 11/1 – CLIMATE (IN)JUSTICE**


**TUES. 11/6 – NO CLASS - ELECTION DAY**

**THURS. 11/8 – FOOD JUSTICE**

**Social history reflection essays due**


**TUES. 11/13 – WOMEN, WOMEN’S HEALTH AND ENVIRONMENTAL JUSTICE**


Oliver, Dana. 2015. “It’s Not Just Nail Salons. Hairstylists Face Serious Health Problems, Too” Huffington Post May 22. [Also view short video]

**THURS. 11/15 – ENVIRONMENTAL JUSTICE POLICY SOLUTIONS – FOCUS ON TOXICS REFORM AND THE PRECAUTIONARY PRINCIPLE**

Guest Speaker: Jamie McConnell, Director of Programs and Policy, Women’s Voices for the Earth


**TUES. 11/20 – EJ SOLUTION: CLEAN PRODUCTION, ZERO WASTE AND CORPORATE ENVIRONMENTAL RESPONSIBILITY**

Grad student term paper/case study drafts due

Readings to be assigned

**THURS. 11/22 – THANKSGIVING – NO CLASS!**

**TUES. 11/27 – EJ POLICY SOLUTIONS: INCORPORATING EJ INTO ENVIRONMENTAL REVIEWS AND LAND USE PLANNING**


Recommended

**GRAD**


**THURS. 11/29 – COLLABORATION AND COMMUNITY-ENGAGED RESEARCH**

Grad student term paper/case study peer reviews due

Wilson, Sacoby, Aaron Aber, Lindsey Wright and Vivek Ravichandran. 2018. “A Review of Community-engaged Research Approaches Used To Inform Policy Choices and Eliminate Disparities.” In The

**TUES. 12/4 – FINAL EXAM IN-CLASS WORK DAY**

**THURS. 12/6 – GRAD STUDENT PRESENTATION(S)**

**MON. 12/10 – FINALS WEEK CLASS MEETING / COURSE WRAP-UP (CLASS MEETS 3:20 – 5:20 PM)**

Undergrad final exam and grad student term papers/case studies due Wed. 12/12
First National People of Color Environmental Leadership Summit
Principles of Environmental Justice
(1991)

We, the People of Color, are gathered together at this First National People of Color Environmental Leadership Summit, to begin to build a national movement of all peoples of color to fight the destruction of our lands and communities, do hereby reestablish our spiritual interdependence to the sacredness of our Mother Earth; we respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to insure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and to secure our political, economic and cultural liberation that has been denied for over 500 years of colonization and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice.

1. Environmental justice affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.

2. Environmental justice demands that public policy be based on mutual respect and justice for all peoples, free from any form of discrimination or bias.

3. Environmental justice mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.

4. Environmental justice calls for universal protection from extraction, production and disposal of toxic/hazardous wastes and poisons that threaten the fundamental right to clean air, land, water and food.

5. Environmental justice affirms the fundamental right to political, economic, cultural and environmental self-determination to all peoples.

6. Environmental justice demands the cessation of the production of all toxins, hazardous wastes, and radioactive substances, and that all past and current producers be held strictly accountable to the people for detoxification and the containment at the point of production.

7. Environmental justice demands the right to participate as equal partners at every level of decision-making including needs assessment, planning, implementation, enforcement and evaluation.

8. Environmental justice affirms the right of all workers to a safe and healthy work environment, without being forced to choose between an unsafe livelihood and unemployment. It also affirms the right of those who work at home to be free from environmental hazards.

9. Environmental justice protects the rights of victims of environmental justice to receive full compensation and reparations for damages as well as quality health care.


11. Environmental justice recognizes the special legal relationship of Native Americans to the US government through treaties, agreements, compacts, and covenants affirming their sovereignty and self-determination.

12. Environmental justice affirms the need for an urban and rural ecology to clean up and rebuild our cities and rural areas in balance with nature, honoring the cultural integrity of all our communities, and providing fair access for all to the full range of resources.

13. Environmental justice calls for the strict enforcement of principles of informed consent, and a halt to the testing of experimental reproductive and medical procedures and vaccinations on people of color.

14. Environmental justice opposes the destructive operations of multi-national corporations.

15. Environmental justice opposes military occupations, repression and exploitation of lands, peoples and cultures.

16. Environmental justice calls for the education of present and future generations which emphasizes social and environmental issues, based on our experiences and an appreciation of our diverse cultural perspectives.

17. Environmental justice requires that we, as individuals, make personal and consumer choices to consume as little of Mother Earth’s resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to insure the health of the natural world for present and future generations.