THE GROUNDWATER APPROACH:
building a practical understanding of structural racism

written by BAYARD LOVE AND DEENA HAYES-GREENE OF THE RACIAL EQUITY INSTITUTE
In an effort to help leaders, organizers, and organizations stay focused on the structural and cultural roots of racial inequity, we developed the “Groundwater” metaphor and accompanying analytical framework to explain the nature of racism as it currently exists in the United States.
In 2013, inspired by Dr. Camara Phyllis Jones’s insights about the power of allegory to make complex concepts easily understandable, we came up with “the Groundwater” as a metaphor for structural racism. The simple analytical framework that supports the metaphor is equally important; we outline that framework in this piece. Why is it so important? We believe that effective solutions require accurate diagnoses, and that our collective understanding of why we have inequity is largely incomplete or altogether incorrect.

Any wisdom present here was developed over years of movement-building and anti-racist community organizing and includes the input of thousands of organizers, community members, and leaders from across the U.S. and beyond. All contributors are too numerous to mention here, but certainly none of this would exist if not for the leadership and mentorship of the People’s Institute for Survival and Beyond based in New Orleans, LA; the Racial Equity Institute based in Greensboro, NC; the work of academics like sociologist Dr. Eduardo Bonilla-Silva and epidemiologist Dr. Camara Phyllis Jones; and the leadership of Joyce James and all of the team at the Texas Health and Human Services Center for the Elimination of Disproportionality and Disparities in the years following the Center’s creation in 2010. The Groundwater metaphor was first presented by Joyce James and Bay Love in 2013. We have built on that foundation and encourage others to further the work from here.

Our metaphor is aligned with many who trace racial inequity to “structural racism,” “structural racialization,” or a “race-based caste system,” but these are complex terms that can be hard to grasp. We hope the “Groundwater” metaphor helps makes the complex accessible and practical. It’s based on a simple tale of dying fish that goes like this:
THE FISH, THE LAKE, AND THE GROUNDWATER

If you have a lake in front of your house and one fish is floating belly-up dead, it makes sense to analyze the fish. What is wrong with it? Imagine the fish is one student failing in the education system. We’d ask: Did it study hard enough? Is it getting the support it needs at home?

But if you come out to that same lake and half the fish are floating belly-up dead, what should you do? This time you’ve got to analyze the lake. Imagine the lake is the education system and half the students are failing. This time we’d ask: Might the system itself be causing such consistent, unacceptable outcomes for students? If so, how?

Now… picture five lakes around your house, and in each and every lake half the fish are floating belly-up dead! What is it time to do? We say it’s time to analyze the groundwater. How did the water in all these lakes end up with the same contamination? On the surface the lakes don’t appear to be connected, but it’s possible—even likely—that they are. In fact, over 95% of the freshwater on the planet is not above ground where we can see it; it is below the surface in the groundwater.

This time we can imagine half the kids in a given region are failing in the education system, half the kids suffer from ill health, half are performing poorly in the criminal justice system, half are struggling in and out of the child welfare system, and it’s often the same kids in each system!
By using a “groundwater” approach, one might begin to ask these questions: Why are educators creating the same racial inequity as doctors, police officers, and child welfare workers? How might our systems be connected? Most importantly, how do we use our position(s) in one system to impact a structural racial arrangement that might be deeper than any single system? To “fix fish” or clean up one lake at a time simply won’t work—all we’d do is put “fixed” fish back into toxic water or filter a lake that is quickly recontaminated by the toxic groundwater. [1]

Our groundwater metaphor is designed to help practitioners at all levels internalize the reality that we live in a racially structured society, and that that is what causes racial inequity. The metaphor is based on three observations: racial inequity looks the same across systems, socio-economic difference does not explain the racial inequity; and inequities are caused by systems, regardless of people’s culture or behavior. Embracing these truths forces leaders to confront the reality that all our systems, institutions, and outcomes emanate from the racial hierarchy on which the United States was built. In other words, we have a “groundwater” problem, and we need “groundwater” solutions.
RACIAL INEQUITY LOOKS THE SAME ACROSS SYSTEMS

Based on national data for African Americans andwhites, we see consistent inequity in health care, education, law enforcement, child welfare, andfinance, to name a few.

For example, according to data from the corresponding federal agencies:

African Americans are 2.3 times more likely to experience infant death (CDC).
African Americans are 1.9 times more likely to die of diabetes (CDC).
African Americans are 1.5 times more likely to be below “proficient” in reading in the 4th grade (NAEP).
African Americans are 3.7 times more likely to be suspended in K-12 (ED and OCR).
African Americans are 2.7 times more likely be searched on a traffic stop (BJS).
African Americans are 7.0 times more likely to be incarcerated as adults (BJS).
African Americans are 1.8 times more likely to be identified as victims by the child welfare system (DHHS).
African Americans are 2.1 times more likely to be in foster care (DHHS).
African American business owners are 5.2 times more likely to be denied a loan (SBA).
African American business owners are 1.7 times less likely to own a home (SBA).

A chart that shows results across systems using a relative rate index demonstrates the point. [2]
Figure 1: “African Americans are 1.5 to 7 times as likely to have a bad outcome across systems” (sources in text on page 6).

Figure 2: The same data arranged with whites as the reference group demonstrates the same point with a different frame: “Whites are only ~15%–~65% as likely to have a bad outcome across systems” (sources in text on page 6).
Race-conscious leaders could list a plethora of additional examples. In practice, though, even outspoken proponents of equity seldom consider all of them simultaneously. This is a problem.

If the United States solved the achievement gap, for example, but did not address the groundwater of structural racism, the achievement gap would literally re-emerge over time. Inequity in other systems (lakes) would spread through the groundwater and recreate inequity in education. If a child’s grandparent is twice as likely to die of diabetes, that will have a financial and emotional impact on the whole family, which will impact the child’s performance in school. If a child’s parent is less likely to get a job offer that they are equally qualified for, that means less wealth for the family, which will impact the child’s educational outcomes. These impacts across systems flow in all directions, just as water flows between lakes in the groundwater. Effective change, therefore, must be rooted in an understanding of structural racism; it must utilize a groundwater approach.

**That whites fare best in every system across the country usually elicits two questions:**

1. since whites are wealthier on average, how do we know socio-economic difference or differential access isn’t the root?
2. and since we know behavior and culture impact institutional outcomes, how do we know that differences in culture and behavior don’t explain the gaps?

We find it important to debunk these all-too-common explanations for inequity immediately after showing the inequity that exists. **To show that there is inequity but not why there is inequity leaves too much open to interpretation.** The next two observations in our approach begin to address why there is inequity.

**Socio-economic difference does not explain the racial inequity**

If socio-economic difference explained the racial inequity, controlling for socio-economic status would eliminate it; it does not. Scholars and practitioners have demonstrated this over and over across multiple systems. Here are three examples:

1) The most recent CDC data show racial disparity in infant mortality, even when we compare black and white mothers with the same level of education. In fact, white women with a high school diploma or a GED have lower infant mortality rates than black women with MAs, JDs or PhD’s.

2) In 2009, McKinsey & Company completed a comprehensive analysis of U.S. achievement gaps in K-12 education and found that “while independent racial and income gaps exist, black and Latino students underperform white students at each income level.” In 2016, Stanford University sociologist Sean Reardon used the Stanford Education Data Archive to analyze the impact of district-level socioeconomic status, family-level socioeconomic status, and racial identification on
student achievement and found that “Racial/ethnic disparities in academic performance are large, both overall and within individual school districts... [and] even in places where white and black or white and Hispanic students come from families with the same socioeconomic characteristics, racial/ethnic achievement gaps are present, and substantial.”

3) In 2016, Duke University economist William Darity, Jr., looked at the impact of race and wealth on incarceration and found that “racial incarceration disparities persist even for individuals with similarly situated family wealth positions.” The study found, in fact, that over the longer term (27 years), white men in the poorest wealth deciles were less likely to be incarcerated than black men in the wealthiest deciles.

What makes this point starker is that in today’s economy (even excluding the impacts of multi-generational wealth), one’s racial designation is actually a causative factor in one’s socioeconomic status. One clear and relatively well-known example is the study completed by researchers at NBER, Harvard, and the University of Chicago. Researchers sent out 5,000 resumes that were identical, except that half had “black-sounding” names and half had “white-sounding” names. “White” resumes were ~1.5 times as likely to get a call-back compared to otherwise identical “black” resumes. A recent meta-analysis shows these disparities actually increased between 1990 and 2015. Socioeconomic status cannot explain persistent racial inequity in the U.S.; on the contrary, racism further exacerbates existing gaps.

INEQUITIES ARE CAUSED BY SYSTEMS, REGARDLESS OF CULTURE OR BEHAVIOR

Using new methodologies, researchers have generated more and more evidence that systems cause the inequity regardless of people's behavior or culture. This is a critical point, given the common narratives that inequities are explained by cultural or behavioral differences. Here are three examples:

1) In its landmark 2002 study, "Unequal Treatment," the Institute of Medicine (IOM) found that "research indicates that minorities are less likely than whites to receive needed services, including clinically necessary procedures, even after correcting for access-related factors, such as insurance status” and that “health care providers’ diagnostic and treatment decisions, as well as their feelings about patients, are influenced by patients’ race or ethnicity and stereotypes associated with them.” The IOM report references a number of peer-reviewed studies that control for patient history, symptomology, and demeanor to show that race alone has an impact on treatment. Research since 2002 has corroborated IOM’s findings.

2) Similarly, banking and lending institutions provide an advantage for whites even when controlling for credit score and financial history. In a new study from 2018, The Center for
Investigative Reporting found that “African Americans and Latinos continue to be routinely denied conventional mortgage loans at rates far higher than their white counterparts. This modern-day redlining persisted in 61 metro areas even when controlling for applicants’ income, loan amount, and neighborhood, according to a mountain of Home Mortgage Disclosure Act records analyzed.” It is simply inaccurate to suggest that whites fare better in the world of finance and wealth because of certain behaviors or cultural characteristics regarding saving, spending, and investing.

3) In their 2015 study of education and discipline, Stanford psychologists Jennifer Eberhardt and Jason Okonofua presented teachers with written vignettes of student misbehavior. The vignettes were identical except that half had “black-sounding” names and half had “white-sounding” names. Teachers of all races said that (fictitious) students with black-sounding names were more disruptive, more likely to be repeat offenders, and more appropriately labelled as “troublemakers.”

These studies represent a small sample of many. Racial inequity cannot be explained by behavioral or cultural differences between racial groups. On the contrary, systems and systems representatives treat people differently based on race regardless of their culture and regardless of how people behave.
Taken together, we think these observations point to the sobering reality of structural racism in the United States. Clients and communities across the country are finding the groundwater metaphor to be useful in re-framing and re-focusing their work, leading to new partnerships and exciting new openings for action.

One mid-sized urban school district began to use a groundwater approach and was quickly drawn to establishing unprecedented cross-systems partnerships with law enforcement, civil rights leadership, and economic developers, among others. Most leaders agree that this kind of collaboration is necessary to address complex social problems; a groundwater analysis makes that possible.

In another region, the groundwater approach took hold through a set of smaller initiatives that were initially completely disconnected. Those initiatives started in churches, academic institutions, community organizations, and government, and are now connecting through the analysis and growing into a web of aligned stakeholders. Previously, epidemiologists felt their work was only tangentially related to economic development; now epidemiological data is being combined with economic development data to demonstrate a structural reality that people can work together to dismantle. New analysis is building unity and helping to drive electoral victories, policy changes, new leadership development, and unprecedented collaborations across the region.

We’re encouraged by the work that is being done across this and other countries and continents. As we continue to expand our movements, let’s keep deepening them too.
NOTES:

[1] The challenge of seeing the structure is exacerbated by the way we talk about inequity. Every system has racial inequity but uses a different term for it. In child welfare, for example, a prominent term to describe racial inequity is “disproportionality;” in healthcare, “health disparities;” in education, “achievement gap;” in criminal justice, “disparate sentencing” or “disproportionate minority contact.” In economic development, racial inequity might be described as underutilization of “minority business enterprises,” signaled though terms like “inclusive innovation” (which would be necessary only because of existing exclusion). By using different language for different manifestations of racial inequity, we have made it difficult to consider that they may be various manifestations of a single structural phenomenon that we call structural racism.

[2] We choose to use a line chart to demonstrate the data, even though it does not represent a series of data over time, because it can help viewers imagine the interconnectedness of the outcomes. Some clients and colleagues prefer to use a bar chart, which works as well.
REFERENCES:


9. Ibid.


Please visit [www.racialequityinstitute.org](http://www.racialequityinstitute.org) for more information on our work, the metaphor, and examples of the Groundwater approach applied.
MEASURING RACIAL EQUITY: A GROUNDWATER APPROACH
SESSION OVERVIEW

1. A Groundwater Approach: The Case for a Structural Approach

2. Origins: Some Thoughts On How We Got Here
OUR EXPECTATIONS

(thanks to Bryan Stevenson, author of *Just Mercy*)

- Get closer to the problem
- Change the narrative
- Willingness to be uncomfortable
- Maintain hope
“THE FISH AND THE LAKE”
“If you don’t measure it, you can’t improve it.”

P. Drucker
A “GROUNDWATER APPROACH” IS BASED ON SEVERAL KEY OBSERVATIONS ABOUT RACIAL INEQUITY

1. **Racial inequity looks the same across systems**

2. Socio-economic difference does not explain the racial inequity

3. Systems contribute significantly to disparities
In fact, racial disparity persists in every system across the country, without exception.

<table>
<thead>
<tr>
<th>System</th>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
</table>
| Child welfare             | Disproportionality          | Refers to the proportion of ethnic or racial groups of children in child welfare compared to those groups in the general population.  

1

| Health                    | Health Disparity            | Healthcare disparities refer to differences in access to or availability of facilities and services. Health status disparities refer to the variation in rates of disease occurrence and disabilities between socioeconomic and/or geographically defined population groups.  

2

| Juvenile justice          | Disproportionate minority contact ("DMC") | Refers to the disproportionate number of minority youth who come into contact with the juvenile justice system.  

3

| Education (Achievement)   | Achievement gap             | When one group of students (such as, students grouped by race/ethnicity, gender) outperforms another group and the difference in average scores for the two groups is statistically significant  

4

| Education (Special Ed.)   | Disproportionate Representation | Refers to the “overrepresentation” and “underrepresentation” of a particular demographic group in special education programs relative to the presence of this group in the overall student population.  

5

| Economic Development      | Historically Underutilized Businesses | Businesses that are disadvantaged and are deemed in need of assistance to compete successfully in the marketplace.  

6

Blacks are two to five times more likely to have bad outcomes across systems in NC

Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in North Carolina

...The same holds true in Indiana...

Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in Indiana

![Relative rate index graph](image-url)
Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in Texas

Black

White

Education CPS Juvenile Justice Criminal Justice Health

Outcome

Relative Rate Index
(Times more likely than a white person to have a bad outcome)

Source: State of Texas FY 05 – FY 10 Comparison of Stages 2 & 11.xls; Texas Cross Systems data.pdf
Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in Massachusetts

Sources: MA DPH, MA DOE, Prison Policy Initiative, MA JDAI (Juvenile Detention Alternative Initiative), Nat. Council of Juvenile and Family Court Judges, MA Community and Banking Council, Kirwan Institute, Economic Policy Institute, Annie E. Casey Foundation
**...and in Travis County (Home of UT)...

**Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in Travis County**

![Graph showing relative rate index for different categories such as Health, CPS, Crim. Just., Education, Economic, with Black and White categories indicated.]

**Note: * indicates data for AISD only (disciplinary removals) or all of Central TD (HS grads completing post-secondary). All others Travis County.**

**Relative Rate Index** (Times more likely than a white person to have a bad outcome)

- **Death from diabetes**
- **Infant mortality**
- **CPS Confirmations**
- **Booking to county jail**
- **Disciplinary removals**
- **HS grads enrolled but not finishing post-secondary**
- **Child poverty**
- **Unemployment**

... in Akron...

Akron MSA
Relative rate index for measures across health, education, criminal justice, and economic well-being in Akron MSA.

- Caucasian
- African American
Very premature birth (≤ 32 weeks)

Death from diabetes

3rd graders below reading proficiency level

No high school diploma

Jail Incarceration rate

On food stamps

Below 125% poverty

Unemployment

... in Cleveland...

Cleveland-Elyria MSA
Relative rate index for measures across health, education, criminal justice, and economic well-being in Cleveland-Elyria MSA.

Caucasian    African American
In California, Blacks are about 2-9x more likely to experience a negative outcome compared to Whites.

A fifteen-year trend analysis to determine if conditions in measures such as infant mortality, poverty levels, fifteen-year high school dropout rates, and so on, have improved, remained the same, or worsened.

There is not a single indicator in which African Americans’ well-being is on par with that of white Charlestonians.

Funded and prepared by:
... and nationally racial inequities across systems.

Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in the U.S.

Relative Rate Index
(Times more likely than a white person to have a bad outcome)

Health
- Death from diabetes
- Infant death
- Premature birth
- 4th grade students below grade level
- Out of school suspensions
- Incarceration rate
- Searched on a routine traffic stop
- Incarceration
- Children in foster care
- Unemployment
- Federal SB Contacts

Economics
- CPS

Note: All data is national population data between 2011 – 2015, except police stop and search data, which was a nationally representative survey conducted by BJS.
Said another way, whites have only 25% - 60% as much of a chance of having a bad outcome.

Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in North Carolina.

Said another way, whites have only 25% - 60% as much of a chance of having a bad outcome.

Relative rate index for measures across child welfare, health, education, criminal justice, child welfare, and economic well-being in North Carolina.

Controlling for socio-economic status does not eliminate the effect of race

Selected Sources:


In fact, ‘race causes class’ in today’s economy

Selected Sources

Bertrand, Marianne, and Sendhil Mullainathan. Are Emily and Greg more employable than Lakisha and Jamal? A field experiment on labor market discrimination. No. w9873. National Bureau of Economic Research, 2003.. Available at: 
