



Toward an Ethical Future

SUSTAINABILITY LITERACY IN THE FILM INDUSTRY

BY KAREN STEWARD,
WITH MATHEW RUSK AND ROCIO GIMENEZ



Kurt Lewin wrote, “If you want to truly understand something, try to change it. Unfreezing is the process which involves finding a method of making it possible for people to let go of an old pattern that was somehow counterproductive.”

According to the United Nations, “Sustainability Literacy” is the knowledge, skills and mindsets that allow individuals to become deeply committed to building a sustainable future and assisting in making informed and effective decisions to this end.

Humanity has been warned for generations of the effects and consequences of overpopulation and the environmental impact of climate change, and now we are in crisis mode. Many in the film industry and specifically the Art Department are asking what can be done to contribute to a solution; we all have a desire toward voluntary commitment, but landing in jobs armed with the necessary knowledge, resources and clear guidelines is not always easy, as many of us don’t know where to start or how to speak about environmental responsibility within our crafts. Given that one feature film project can generate as much waste as a small city, what seems like a small personal effort can have a huge impact.

Internationally, the popularity of film and television makes it one of the most highly competitive industries around the world—one of the few that consistently generates a positive balance of trade in virtually every country in which it does business. The industry’s direct jobs employ more people than utilities, crop production and metal manufacturing. According to MPAA.org’s THEME report (Motion Picture Association of America), in 2018, the combined theatrical and home entertainment market was \$96.8 billion, which is up twenty-five percent from only five years ago. This is a huge marketplace that delivers the economic and cultural benefits that enrich lives in so many ways, and the entertainment industry must approach this growing bounty with concern for the environment in order to sustain this generated wealth. Industry professionals who are concerned about the environmental impact of booming growth need mentors who can help them understand how to have an impact on the problem

of waste, and adopt a “zero waste” philosophy, which is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles where all discarded materials are designed to become resources for others to use.

This philosophy means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing zero waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.

In my opinion, one very necessary solution to the entertainment industry’s struggle with environmental harmony is that every project should employ a full-time Environmental Steward, or a similar sustainability position as part of the crew. In 2013, I was Supervising Art Director on *McFarland, USA* for Disney, which was the first and only film or TV project of my career that employed an Environmental Steward as a legitimate position on the crew. I was overjoyed to finally witness an action by the project’s producers that created a position of an educated expert complete with resources, guidelines and metrics that was long overdue. This expert was Matt Rusk, who I recently caught up with and interviewed by phone and is contributing to this article. Together, he and I went to great lengths at wrap to find landfill diversion solutions for construction surplus, built set pieces, Art Department office supplies, furniture and flooring, etc.; which is something I have become accustomed to wrangling myself on most shows, due to the simple fact that it breaks my heart to see so much waste generated on a single show ending up in landfill or on an unwanted garbage barge floating around the oceans while countries argue over who will accept it and take responsibility. For the *McFarland* Art Department, it was a relief to have a collaborator provided by production to

A. THE REAL END OF MOST FILM AND TELEVISION PRODUCTIONS, SCENERY PLACED IN DUMPSTERS HEADED FOR LANDFILL. PHOTO BY HARSHITA REDDY.

B. MATERIALS SALVAGED AND SAVED FOR REUSE AT RECYCLED MOVIE SETS.



MATERIAL RECYCLE			
Item	Size	Amount	Picture
Stack of Conduit	various	Misc	
Stack of Steel (Rebar, etc)	various	Misc	
Flattened Cardboard Boxes	Various	2 Pallets + Extra Piles	
Corrugated Fencing	Aprox 10 Pieces	11'5" x 6'	
Lumber	4 x 6 @ 6'	Misc. (Aprox 15)	
PVC Plastic Sheets (roofing)	8'x4" Full Sheet	2 Full 3 Half 1 Piece	

A. MATERIALS FROM MCFARLAND STACKED FOR DONATION AND RECYCLING.

B. AN EXAMPLE OF THE MATERIAL WRAP LIST FROM MCFARLAND DETAILING RECYCLING AND REUSE OF THE MATERIALS.

help us with resources at wrap. However, after speaking with Matt recently, I learned that his position was basically treated as a production assistant, and at the time, he was on his own in terms of creating cost analysis, providing resources for donations and creating wrap reports.

Matt arrived in the unique position of Environmental Steward by way of a journey of research and self-education that began on his first film during summer break while in college in 2007. As an office production assistant during preproduction on *The Happening*, he was tasked by a producer to find some “greener” solutions. There were few resources that provided a direct playbook of how to have a greener production, so he turned to the few materials and guidance available, in addition to researching impactful steps that individuals and businesses could implement, and determined what specifically was most applicable to the film industry and this specific project. Matt expressed the production’s goal to operate with environmental consciousness to all production personnel and shared department-specific environmental best practice suggestions with each area in the preproduction process.

What soon became clear from his research was that, like many industries, the film industry had a lot of opportunity for improvement. He realized the industry needs to get more proactive and serious about finding solutions and transition to more conscious practices. Learning of the importance of curbing societies’ impact on the planet, Matt was determined to pursue a career in sustainability and was pleased to see within a few years, the film industry was taking environmental impact of productions more seriously, with Disney committing to hiring the Environmental Steward position on all their live-action projects. Industry resources and environmental impact tracking templates were also created by the Motion Picture Association of America’s (MPAA) Best Practices Guide and the Environmental Media Association’s (EMA) Green Seal Guide and certification program.

Champions for green film production have risen at the studios’ producer level, and within a group of sustainability film practitioners serving in new environmental roles that were being brought onto productions. The Producers Guild of America (PGA) also created a green committee that was crafting new tools to track and measure an environmental footprint and gathering resources and vendors across the USA that could offer new solutions and/or alternatives.

- The increased focus and resources, along with the new environmental positions, led to some positive progress. During his nine films running environmental initiatives, some highlighted accomplishments on individual films included:
- 3,392 meals donated to food shelters by making daily donations from catering
 - 107,500 disposable water bottles avoided by using reusable bottles and bottle refilling station
 - 800 gallons of fuel saved by using renewable energy and LED lighting technology
 - Lumber exclusively sourced from certified sustainably managed forests through new wood procurement policy
 - 60 trees saved by reducing paper usage and altering paper sourcing and disposal practices
 - On one film, by working closely with the Art Department, construction department and wardrobe department, 21.7 tons of construction materials, clothes and supplies were donated to nonprofit partners

Many of these positive impacts were accomplished without significant increase in production costs with some projects breaking even on the investment in sustainability or even saving money as a result of waste reduction. With a bit of upfront investment in sustainability, initiative creation (beginning with the end and with the environment in mind) productions made positive progress in mitigating environmental impact and greatly benefited the community.

While progress continues and more productions incorporate an environmental or sustainability position (with the position valued little more than a PA), progress has been capped because many of



those who serve in the position move on into more traditional film department roles which seemingly have an established path of career advancement, or they pursue sustainability roles elsewhere. With the role not offering stability, experienced stewards move on, and with them some key know-how and expertise. The industry must rally to ensure this is a position on all film/TV projects, and support it as a necessary and legitimate career path. This should become a priority in discussions with studios and producers.

As a Supervising Art Director and Production Designer for almost thirty years, I feel that another big challenge for environmental change is shifting the philosophical approach to the actual process of design. Designing a TV show or movie project is challenge enough. To effectively tell the visual story of characters in a script within budgetary constraints is already a huge endeavor; add to that challenge a design process that asks a designer to be considerate of the environment, as well as being budget conscious without environmental

C. A TYPICAL STAGE BUILD, SHOWING THE RELIANCE ON LAUAN THAT IS TYPICAL IN THE INDUSTRY.

D-F. MATERIALS THAT HAVE BEEN SALVAGED AND MADE AVAILABLE FOR REUSE AT RECYCLED FILM SETS.





A

literacy, and the job can seem chaotic within the shorter and shorter preproduction times. In a world where the script can and will change with rapid speed, location requirements shift and actor availability cause problems with scheduling; how does the Art Department come to the table with a process toward modular design, greener materials and vendor databases, and a will and desire to educate collaborators away from the familiar (i.e., chemical-based paints and surface materials still used by some when there are smart alternatives, such as carpet companies who will reclaim the carpet, paint companies who recycle leftover material, and prop rental houses who will take back furniture and scenery, even scenery rental houses who will rent an entire living room, doctor's office or storefront set). Designers by nature are reluctant to reuse scenery from another show unless they can successfully alter it.

Some studio lots have "red book" vendors that must be used when working on the lot, which can deter an independent choice for Art Directors and designers when it comes to choosing glass, lumber and other major construction materials, and can prove frustrating if trying to change protocols. But imagine if those vendors selected by the studios were strictly green-minded companies.

Art Departments must become versed in selecting materials that are sustainable and low impact from cradle to grave. Take lauan for example. This is an unsustainable, overconsumed wood that causes drastic deforestation and it is often illegally logged. This rainforest-produced wood material

is used widely by the film industry and the price is automatically factored into a construction budget because it is and has been the go-to building material due to its stability, ease of painting, staining and treating the surface, and for now, price point and availability.

Every five years or so, I look around for new alternatives, and there are more and more each time I look. Strawboard, Ag-Res, Hardboard, Fiberboard and Temperate Hardwood Plywood (nearly identical to lauan) are all out there among other solutions, like convincing your show to deconstruct, reuse and store set materials (which brings its own issues with production paying extra labor and storage fees—that is often a hard sell). The Rainforest Relief website is a great resource for understanding rainforest woods.

It only takes a few environmentally dedicated construction coordinators collaborating with Art Directors and producers to start using alternative materials (like bio-composites made from sunflower seed husks, and cariboard which is like MDF, but made from agricultural waste fibers) before the trend will catch on, and until the lumber companies begin to make the alternatives available within a comparable price range. The industry must start utilizing these alternative materials.

My colleague Rocio Gimenez recently co-authored an article with me for Production Designers Collective (The full article can be found on the Production Designers Collective website), and was part of a panel about green filmmaking as

part of the 69th Berlin Film Festival, talks about her personal challenges as a young Production Designer working in several countries.

Rocio continues: "As Karen mentions, the commitment to zero waste is crucial for preserving the environment from the footprint of film productions. In the films that I've been involved, there was never an Environmental Steward present, so it was always on me and the rest of the Art Department to be environmentally conscious and responsible for the pieces produced. From my experience in smaller shows and independent feature films, I find that it's always great to start planning early on, as we shop and build, to already have plans for the pieces produced, since wrap times are usually very limited. I try to always communicate with other Production Designers, Art Directors and line producers, to see which productions are happening immediately after ours, so we can offer the scenery, invite them to our set sales or separate pieces for other projects from the beginning of production. This generates camaraderie between fellow colleagues, helps with budgets, and repurposes materials without always having to buy and build new. Reuse of

materials can also be accomplished on Art Department forums, like Artcube, or Facebook groups such as Art Department—Film & TV Industry and Film Industry Materials Exchange—a wonderful page created by Karen Steward. On larger shows, much of the responsibility falls to the construction coordinator and shops that build scenery as needed, so I find that the circularity of the set is more difficult to control in terms of deciding where built scenery will go after principal photography has wrapped, or to decide which materials to use to build the sets. But it's always great to start the conversation with construction coordinators, to find ways to repurpose constructed set components as we have to keep producing scenery."

Finally, it is my hope and desire that sustainability literacy grows among those who work in this craft; hand-in-hand sharing language of the urban environment in which we must survive and thrive as conscientious humans for the rest of time. It is imperative for the survival of our species and the root of the rich and important stories that we must continue to tell in our film and television projects. **ADG**

B. SCENERY BEING SAVED FOR FUTURE USE.

C. REDUCE, REUSE AND RECYCLE.

A. BUILDING SALVAGE YARDS CAN BE A GREAT RESOURCE FOR BOTH ACQUIRING USED MATERIALS AND RECYCLING BUILT ELEMENTS.



B



C