

The Mekong River

An Expedition Proposal

By Garrett Cooper

Submitted in partial completion of the
requirements for EXP 436: Senior Expedition

Introduction and Goals.....	3
Itinerary.....	8
Weather and Conditions.....	12
History and Culture.....	14
Expeditionary History of the Mekong....	17
Science.....	20
Minimal Impact.....	23
Risk Management.....	24
In Case of Emergency.....	35
Training, Conditioning, and Experience.	37
Nutrition.....	39
Equipment.....	41
Budget.....	44
In Addition to the Risk Assessment.....	45
Bibliography.....	51

While backpacking Snowdonia National Park in Wales I had some problems with one of my toes. My companion and I decided it was best to camp for a couple days in a small village the trail passed through. Across the road from where we were camped was a small pub, so of course we spent some time in it. On one of the nights we were there we met a well-traveled man who was originally from Ireland but was now living nearby. We started trading travel stories over an atlas the pub kept behind the counter for just such an occasion. While flipping through the pages, he told me about a country he said I had to visit. He said Cambodia was an amazing country, one of his favorites. He made it sound like a country that might be worth visiting for me, and about a week later I met Zeman McCreadie who has a motorcycle guiding company in Cambodia. I tried to set up an internship with Zeman, and while he agreed to take me on, the tours just didn't get booked for the time I am available. By this time the wheels had turned too far, and I was hooked on the idea of Cambodia.

Since I am in the Expeditionary Studies program and specializing in paddle sports, it only made sense for me to plan my expedition on the water. I have always liked the idea of living on and traveling down a river. I have fantasized about it in the past; I even tried to ride a log down a river in Oregon when I was around 14 years old. I didn't make it more than a few hundred yards because the log got stuck on some rocks, but the desire was there. Now I have another, better thought out opportunity.

For my senior expedition I will be traveling alone nearly 9,000 miles to Cambodia, to paddle a native boat down the Mekong River for at least 11 days, covering nearly 200 kilometers. I will begin as far north in Cambodia as possible, preferably at the foot of Khone Falls which is the widest waterfall in the world and marks the border with Laos. From here I will travel south down the river passing through the largest fresh water Irrawaddy dolphin population in the world, ending in Kratie or another nearby village.

In preparation for this expedition I have read several books, advanced my canoe skills, contacted people in Cambodia, got self-defense training, received several vaccinations, purchased some new gear, invested a significant amount of time and money, and ensured an acceptable level of physical fitness. The next step is getting to Cambodia and setting out on the river.

I have never been in this part of the world, so everything including the culture, language, and environment will be completely new to me, though I have spent some time in other tropical areas. For this expedition, my intentions are to explore what's in and around the river including some of the many islands, flora, fauna, and to learn about the people, culture, and life along the Mekong River. More than just exploring my way down the river, I will be searching for the rare fresh water Irrawaddy Dolphins. Having more than one goal tends to make the trip that much more exciting, and the pursuit of rare animals adds an extra sense of purpose to the expedition. As secondary goals on previous trips, I have gone out of my way to look for and find condors, penguins, crocodiles, sloths, two kinds of salt water dolphins, and moose, as well as a couple more I did not find.

On a personal level, I hope to build evidence that I can travel anywhere in the world. I expect to have a completely new experience that requires me to use my previous training and experience to adapt to life traveling on a tropical river. I am already confident I can get anywhere reachable by motorcycle, but I want to expand my abilities to traveling down this kind of river. Expeditions like this add to the list of things I have done. When I die, I want to have accrued a unique set of experiences like this expedition to Cambodia, which are specific to my life. I would like to have stories to tell when I am old, and to not waste the life I am lucky enough to have.

Professionally, an expedition like this is a good addition to my resume. It could be used as a selling point for clients, because if I can handle this expedition on the Mekong River, I can probably handle other expeditions. This expedition is a great opportunity to improve my paddling skills and to become a better-rounded traveler. As far as paddling is concerned I will grow over this trip, though I won't be paddling a kayak, and not a canoe like the ones I am used to from the Expeditionary Studies program. I will gain experience with an indigenous water craft, expanding my knowledge of paddle sports even further.

Assuming I get to Cambodia and make it up river where I will start, there is still the possibility of failure even before I begin. The first thing I need to do before I can get on the water is find a boat to buy or rent that is suitable for my needs. Because of this, just getting on the water is going to be a challenge. So far I have no way of knowing how difficult this will be, though if I fail there are other places I can go to buy a boat and try to truck it in to my start point. My goal is to find one to buy or rent, in or north of Stung Treng and as close to my start

point as possible. If I can't find a boat where I want it, the next obstacle will be to search further away and get it trucked in. I can search the rural areas of the Kong, San, and Srepok River for a boat, and if trucking one in from here is not a viable option, I can start my expedition on one of these tributaries, all of which flow through Stung Treng and over a waterfall before entering the Mekong.

Of the possible tributaries I could start my expedition on, I like the Srepok River the best. This river was the setting for the film *Apocalypse Now*, though in no way has that made this river a tourist destination. It will be more remote than the Mekong, but very little about my proposal or risk management plan will change. Even distances remain roughly the same with two potential start points. One start point is further upstream and would put nearly all my expedition on this river, most likely ending near Stung Treng. The other start point is shorter and would still allow me to finish the expedition at Krati, my original end point.

If anything happens that prevents me from getting a boat or getting on a river in Cambodia, the expedition has failed and I will need to submit another proposal. There is nothing else in Cambodia that will satisfy the senior expedition requirements for me, so I will enjoy the country in other ways.

Assuming I do get on the river, I will be living out of a boat I have never paddled before, on a river I have never seen, in an unfamiliar country. If something should go wrong while I am on the river and I need to abandon the expedition, I can walk to the east which is river left for the entire expedition unless I go beyond my proposed finish point of Kratie. Within walking distance is a road running north and south which could be reached from any part of my route

on the river, though I don't expect many easy paths unless it is near a village. The most important difference for my contingency plan on the Srepok River is the direction of travel necessary in case of a forced walk out. I will need to stay with the river if at all possible to try to find a village. If, due to some kind of extreme scenario, staying on the river is not possible, walking north would eventually get me to a road, however, this should only be attempted if I am healthy. Walking to the south would take me through a very remote wildlife sanctuary, and for no reason should a walkout be attempted here. Walking south could mean walking several days through difficult jungle; this is not where I want to be if I was forced to walk out.

The uncontrollable factors for this expedition are considerable. Through research, I am identifying as many variable factors as possible to increase my chance of success, though there is little usable information on this section of river. As far as known factors are concerned, I believe I have or can gain the knowledge, technical skills, experience and funds to attempt this expedition (EP1). One place I know I will fall short is knowledge of the language, though I can learn some important words and phrases as well as have a phrase book on me at all times. I will also try to find a language school to attend for a week and learn some of the basics. I don't know exactly what I will be paddling, but hopefully I can find some kind of canoe. To prepare for this I have gotten more BCU training and received my 3 star award and 4 star training. If I don't get a canoe, I expect I will be able to transfer my previous experience to a new kind of water craft.

Itinerary

After arriving in Cambodia I will take at least a couple days, possibly a week to get acclimatized, get a feel for the country, and find a boat and supplies. I may even take a week of classes to learn a bit of the language which will also provide an excellent opportunity to learn about the culture from a native Cambodian. Once I get on the water, hopefully near the border with Laos at Khone falls I will begin the paddle down river. I will land in Cambodia on December 15th and will likely begin paddling by the end of the month. This is the perfect time of the year for my expedition as river conditions and weather will be in my favor. See *Seasonal Weather and Conditions* on pg. 12 for a more in depth look.

I will need to average 3 kilometers per hour, for 6 hours a day to be on schedule, though some days will certainly cover more or less distance, and I may be on the water for more or less than 6 hours a day. I feel that this is a reasonable speed in any kind of boat I am likely to get. A faster boat simply means I can explore more of the islands on my way down, a slower boat will require more time on the water. If I am ahead of schedule, I will simply continue downstream, though after Kratie I expect to be in a more populated section of river and have easier access to roads.

Day 1

Mileage today depends on what time I am able to get on the water, but I don't expect to go much further than ten kilometers. The day will be about getting a feel for the boat and river.

This section of river is a dolphin hot spot so I will of course be searching for them. There appear to be some sandy islands I might be able to camp on, depending on the water level.

Day 2

Today will be my first full day on the water. This northern section of the river is full of bird life and islands so I would like to explore and enjoy the wildlife. I have planned 17 kilometers for the day, but depending on how much time I spend exploring the islands, actual distance down river could be considerably less. There are possible beaches to camp on but I may set up my hammock on an island.

Day 3

Day three will still have lots of islands to explore, though less than day two. I would like to explore more of these islands as I paddle down river. I have planned 22 kilometers for the day but again it may be less depending on how much time I spend on the islands. I plan on camping before the river becomes populated near Stung Treng.

Day 4

A short paddle down river and I will arrive in Stung Treng which will provide an opportunity to resupply and get anything else I may need. The day will likely cover the most distance so far as there are few islands to explore. I may go down a smaller waterway on the west side of the river which goes around a large island. I will almost certainly camp on this waterway after about 24 kilometers of paddling.

Day 5

A little under half of the day will be spent on the previously mentioned smaller waterway at the west of the river before re-entering the main flow of the Mekong. I will paddle another 23 kilometers down river before camping, most likely on another island, which marks the beginning of another stretch of islands.

Day 6

Another day spent exploring the many islands of the Mekong. The river on this section of river breaks up into many very small waterways. I might try to find my way down one of these smaller veins, and assuming it doesn't get so small I have to turn back, I plan to cover 20 kilometers today.

Day 7

I will probably spend the entire day paddling on a small eastern vein of the river, covering about 23 kilometers and camping before an area that appears to have some rice paddies, and likely a small population. On the other hand I might paddle slightly further and camp near the people and see what they are all about.

Day 8

Today I will paddle about 20 kilometers down the same or another nearby eastern vein of the river back down to the main flow of the Mekong. I will most likely camp at the mouth of this small waterway before re-entering the greater Mekong. Near here is an interesting looking temple called the 100 pillar wat, and I intend to go see it, preferably before it gets very late.

Day 9

Today I am entering another area known for its Irrawaddy Dolphins. I will be in the main flow of the Mekong all day and will camp about 21 kilometers down the river. I would like to set up my camp either on an island or on the banks with a view of the river to try to spot the dolphins.

Day 10

Another 17 kilometers down the river and I will arrive in Krati, marking the end of my proposed route.

Day 11

This is an extra day that could be spent in an interesting place along the river or to simply take a day of rest. I may also take more time to explore, particularly in an area with many islands. As another option I could simply continue another 20 kilometers to the village of Prek Chamlak for an extra day of paddling.

Seasonal Weather and Conditions

Cambodia's dry season is from November to June, and the coolest months with the least humidity and rainfall are November, December and January (NG1). According to *Lonely Planet*, November to March is the best all-round time to visit. I will be in Cambodia from December to January, which is the dry season, but before everything gets too dried out and dusty. The river will no longer be flooded while I am on my expedition, "This makes dolphin-spotting around Kratie and the Lao border that much easier..."(LP1). While the river will no longer be flooded, it also will not be too low with dried up tributaries. This makes it the perfect time for me to go, as the weather and water levels will be in my favor.

Temperatures in Cambodia at this time of year will be fairly comfortable. The average annual temperature in Cambodia is around 81 degrees. The dry season temperatures range between 82 and 95 degrees. According to *National Geographic Cambodia*, "... there are sort of four seasons: dry and cool (Dec.–Feb.), dry and hot (March–May), wet and hot (June–Sept.), and wet and mild (Oct.–Nov.)." (NG2) Since I will be in Cambodia during the dry and cool months, I can expect the average temperatures to be at the lower end of the 82-95 degree scale.

While when it comes to weather, my timeline of December through January is the perfect time to visit Cambodia, though this is also the peak tourist season. Normally I might consider this a problem as I don't like to be in places with too many other tourists for very long, however, considering the nature of my expedition, I don't think I will have to fight the crowds. I

will be well off the beaten tourist path, and other than the beginning and end of my expedition at two dolphin hot spots, I will be surprised to see any other travelers.

(NG1) see *Weather* in *National Geographic Cambodia*.

(NG2) see pg. 267 in *National Geographic Cambodia* under *Climate*.

(LP1) see pg. 243 in *Lonely Planet Cambodia* under *When to Go*.

History and Culture

Cambodia has anything but a boring history, from the earliest hunter gatherers around 50,000 B.C., to the early kingdoms of 100-802 A.D., to the Angkor era of 802-1431 when many of the great archeological sites in Cambodia were built, to the civil wars and genocide from 1970-1997. (NG1). The ruins of the Angkor period will be some of the most interesting things to see in Cambodia including Angkor Wat which is often called the eighth wonder of the world. What interests me most though, is the more recent history. Memorable history is what people I will meet have lived through and remember, specifically the Khmer Rouge. The psychological remnants from this time will still be present and affect their daily lives.

“Like an anthill crushed underfoot, Cambodia was brought to near ruins during the war and turmoil... it seemed as if steel-toed boots were grinding out unforgettable destruction on a helpless population.” (NG2). In 1970, Cambodia had begun a civil war that lasted for five years until the government forces were beaten into submission by the Khmer Rouge. During this time several hundred thousand people died in the fighting.

On the 17th of April 1975 the Khmer Rouge marched into the capital, Phnom Pen, and officially took control of the Country. All government soldiers and civil servants were executed. Phnom Pen and all other cities were evacuated by the Khmer Rouge on the pretense that Americans were coming to bomb the cities. They were told they could return in three days, but it was all a lie to get people out of the cities. People were forced to walk hundreds of miles into the country side, many dying along the roadside. Children’s feet bled, women gave birth in the dirt, and they had no idea how much further they had to go. (KF1) The calendar was reset to

year zero, all forms of currency and private property were abolished, they shut down all schools and religious buildings, everyone was forced to wear identical black clothing, adults were selected at random to marry, and the country was totally cut off from the outside world. (LP1). Children were separated from their families, often taken to be “re-educated” in political indoctrination sessions. “Children witnessed their parents being murdered and even babies and toddlers were imprisoned, tortured, and killed.” (NG3).

The Khmer Rouge was very paranoid, believing they had enemies everywhere. Anyone who was believed to be impure, suspect, or did not live up to the peasant ideal was arrested and brought to security centers to be tortured until they produced the names of co-conspirators, and they were killed. Then the people who were identified by the prisoner were arrested, tortured, produced a list of names and were killed. This process kept repeating, and the lists kept growing. (EP1) “Around the country, thousands of Cambodians deemed traitors were executed en masse in killing fields. Such individuals included intellectuals, former Khmer Republic officials, ethnic minorities, and anyone suspected of serving the CIA or the Vietnamese.” (NG4) According to Lonely Planet, “It is still not known exactly how many Cambodians died at the hands of the Khmer Rouge during the three years, eight months and 20 days of their rule.” Best estimates range from one to three million people were killed by execution, lack of proper medical care, exhaustion from over working, and starvation while the Khmer Rouge was in power. (LP3)

Behind it all was Pol Pot, also known as Brother Number One. The goal was to “implement a radical Maoist and Marxist-Leninist transformation of the country to create a

rural, agrarian utopia.”(NG5) The perpetrators of the atrocities and crimes against humanity, for which there are no excuses, are still living in the country. It is however impossible to know who is who because many would not admit to participating in the Khmer Rouge, and those who do, seem to regret what they have done. (EP2)

Today, Cambodia is still struggling to revive much of their culture that was lost to the Khmer Rouge including their religion and arts. Most Cambodians practice Theravada Buddhism, but in the seventies many monks were murdered and over 3,000 wats, or religious buildings, were damaged or destroyed. Many wats have been rebuilt and Buddhism is once again widely practiced. All Buddhist males are expected to spend some time as monks, who are fed by people trying gain karma to reduce the number of births they must endure before reaching nirvana. (LP4)

Since the Khmer Rouge destroyed so much art and killed the artists, Cambodians are struggling to remember what once was. There are very few of the old masters left, but music, dance, and other arts are being taught to the new generation. A good documentary on this subject is titled *The Flute Player* in which Arn Chorn-Pond, a survivor of the killing fields, struggles to save Cambodia’s traditional music from disappearing completely.

(NG1), See chapter titled *Cambodia History*, (NG2) pg. 182, (NG3) pg. 183, (NG4) pg.35 and (NG5) pg. 34 in *National Geographic Traveler: Cambodia*.

(LP1), (LP2), (LP3) see chapters titled *History* and (LP4) *Religion* in *Lonely Planet: Cambodia*.

(EP1), (EP2) see *Enemies of the People*.

Expeditionary History of the Mekong

Rivers are often an explorer's first opportunity to travel to the interior of an unknown land. Every great river deserves great expeditions, and in today's world there have been great expeditions on all the main waterways of the world, and the Mekong is no exception.

The first serious expedition on the Mekong River was led by the French in 1866. Ernest Doudard de Lagrée, an entomologist, led a team of six primary explorers and 16 soldiers, interpreters, and an artist up the Mekong to try to find a route to easily access western China for trade. Their most important discovery was that the river had too many rapids and waterfalls to ever be useful as a trade route. The furthest north they could get by boat was Khone Falls, the start point of my expedition, and not far into theirs. The team decided to press on and the expedition became one with the sole purpose of exploration. (EMM)

Doudart started the expedition with health problems, specifically a chronically ulcerated throat which caused him pain for much of the expedition. Compounding his health problems during the expedition he suffered from fever, amoebic dysentery, and wounds caused by leeches which became infected. He made it to Dongchuan China but was too sick to go on. Francis Garnier, second in command took charge and left Doudart with the doctor where he died from abscesses on his liver. His heart was removed by the doctor and it was returned to France. (WED) While Doudart's death was tragic, it was a fitting end for Garnier to take command of the team as he did a larger portion of the work and it was his suggestion for an expedition up the Mekong in the first place. Garnier was not put in command of the

expedition from the start because he was believed to be too young to lead the group. After the expedition on the Mekong, Garnier went on to lead another expedition in 1873 up the Yangtze River in China but was later killed in battle. (WFG)

The next serious attempt to navigate so much of the Mekong came in 2004. Australian Mick O'Shea was the first person to navigate the entire Mekong River from its source in the mountains of Tibet to the South China Sea. He traveled mostly solo by white water and sea kayak taking more than 140 days, and covering 4,909 kilometers (NW). In O'Shea's log he describes astonishment at the abundance of bird life on the northern Cambodian section of the Mekong. While camped on an island where people were only just returning after the Khmer Rouge laid waste to the country, he met a man who was actually the first to return to the island. The man told O'Shea that he still remembers the last group of foreigners to come through his village, a group of Australians on a bamboo raft in 1969. O'Shea goes on to describe the people as "Although extremely poor the locals we met were proud to be honest farmers and cherished the peace that they now experienced living on the island." (HM)

There have been several other expeditions on the Mekong for various reasons including research, exploration, and recreation, though most do not accomplish as much as what O'Shea or the French explorers did. I feel it is also important to mention what the natives have likely done. Long before the river was known to the western world, people must have explored great sections of the Mekong. My expedition will build on this history and tradition of exploration and travel on this great waterway.

(EMM) see *Exploring the Mighty Mekong* at
http://www.fulbrightthai.org/fulbrighthay/pdf/LEWIS_AND_CLARK_VOYAGE.pdf

(WED) see *Ernest Doudart de Lagrée* at
http://en.wikipedia.org/wiki/Ernest_Doudart_de_Lagr%C3%A9e

(WFG) see *Francis Garnier* at http://en.wikipedia.org/wiki/Francis_Garnier

(NW) see *In the Naga's Wake: The First Man to Navigate the Mekong, from Tibet to the South China Sea*

(HM) See *History is Made* page of *The First Ever Full Mekong Descent by Kayak* at
<http://www.outdooreyes.com/photosection23.php3>

Science

According to Lonely Planet, “Cambodia is home to an estimated 212 species of mammal, including tigers, elephants, bears, leopards and wild oxen.” In addition to this list, other interesting mammals include the pileated gibbon, the slow loris, and the binturong which is nicknamed the bear cat. There are 720 species of bird in Cambodia, in part from the extensive waterways (LP1) making it a great bird watching destination. 240 species of reptile can be found in Cambodia, 9 of which are snakes whose venom is potentially fatal. “In terms of fish biodiversity, the Mekong is second only to the Amazon...” (LP2). Species include the critically endangered giant cat fish which can weigh over 660 pounds, and the fresh water Irrawaddy dolphins.

The amazing biodiversity of Cambodia also has a disheartening list of endangered species due to the cycle of war and peace, and poaching. Endangered animals “include the Asian elephant, tiger, banteng, gaur, Asian golden cat, black gibbon, clouded leopard, fishing cat, marbled cat, sun bear, pangolin, giant ibis and Siamese crocodile.” (LP3)

I remember hearing about the endangered fresh water dolphins when I was a kid, back then it didn’t even cross my mind that I might see them someday. A secondary goal of my expedition is to find these dolphins, and I will be in areas known to be dolphin hotspots. While the Irrawaddy dolphin can live in fresh or salt water, it is rarely seen at sea. According to Lonely Planet, “The dark blue to grey cetaceans grow to 2.75m long and are recognizable by their bulging foreheads and small dorsal fins.”(LP3) Before the civil war and the Pol Pot regime,

Cambodia was said to have as many as one thousand dolphins. During the war, dolphins were hunted for their oils, and since then the numbers have continued to drop, even with strict protection measures in place. Motorized boat traffic and fishing has been banned in sections of my route to protect the dolphin (LP4), though I am interested to see what the locals think about this. According to National Geographic Cambodia, “Between 2004 and 2008, an average of 75 percent of newborn calves mysteriously died each year and an average of 16 adults perished from various causes. The Mekong population was estimated at 66 to 86 dolphins (the largest group in the world) in 2007.” My proposed route covers the entire Mekong Irrawaddy Dolphin habitat which is one of only five in the world. With a dwindling population like this, it is unlikely the species will survive much longer.

A concern, not just for the Irrawaddy dolphin but for all life in and near the water is the growing number of dams up stream, particularly by China. Already the water doesn’t rise as much as it used to during the monsoon season, and there are several more dams on the way. More dams could have serious adverse effects on the ecosystem and livelihood of the people who rely on the flooding of the Tonle Sap Lake.

Though I won’t be on the Tonle Sap River or lake for my proposed expedition, I will see it during my stay in Cambodia. An interesting and rare phenomenon takes place here during the wet season when the Mekong floods. The rainy season coincides with the snow melt in the Himalaya, causing the water level of the Mekong rises so much it actually reverses the flow of the Tonle Sap river. Instead of flowing into the Mekong, the Mekong flows into the Tonle Sap Lake, dramatically flooding it every year. The Lake swells to nearly five times its usual size and

the depth from 3-6 feet to around 35 feet, covering about 7% of Cambodia's total area. After the rainy season in November, the rivers take their usual course with the Tonle Sap River flowing into the Mekong. The yearly flooding of Cambodia's waterways is vital to the ecosystem and provides fertile land for agriculture. (NGC1)

If all goes as planned, I will be starting my expedition on the border with Laos. The border is marked by Khone falls, which also happens to be the widest falls in the world. According to the World Waterfall Database, "Khone Falls is a series of falls and rapids where the Mekong River splits into seven large channels, as well as hundreds of smaller ones, and cascades 69 feet over a series of falls and rapids that when measured from one edge to the other stretch 10 kilometers in width, making it the widest waterfall on the planet."(WWD) These falls are the primary reason that the Mekong River is not fully navigable from the sea to China, though a railroad was built to get around it.

(LP1) see *Animals*. (LP2), (LP3) see pg. 321. (LP4), (LP5) see pg. 225 in *Lonely Planet Cambodia*.

(NG1) see pg. 220. (NG2) see *Tonle Sap* in *National Geographic Cambodia*.

(WWD) see *Khone Falls* in *World Waterfall Database*.

Minimal Impact

Leave no trace standards are an important part of this expedition as there are already many problems with the decline of wildlife in Cambodia. While group size is not an issue, a truly LNT camp site is. Camping 200 feet from the river will rarely be an option and a durable surface might be hard to find as there is a lot of mud and wet lands in some sections. I do however have a hammock I will be sleeping in which is an excellent option for a minimal impact camp. All garbage as well as any solid waste in wag bags, will be carried out and disposed of properly. I have no plans of having a fire, and respecting the wildlife in this area is important as there are some endangered species. Some local people rely on the wildlife for their livelihood, and with the declining numbers, I don't need to take anything away from them. Not using a motor is a good step to not disturbing the animals, especially the endangered fresh water dolphin. All wildlife need to be admired from a distance for both their comfort and potentially my safety. An extension of the usual LNT practices, cultural and religious places are found all over Cambodia and it is important to respect them, as well as the locals and their way of life.

Clyde Soles and Phil Powers wrote, speaking of mountain cultures in general, "the mountains, and the people who live among them, must be respected. While this is common sense for most of us, it evidently is not a universal sentiment."(CEP) Assuming mountains are replaced with the Mekong River, this represents my way of thinking for this expedition. Since it is apparently not common sense, it is worth addressing in the planning phase of this expedition.

(EP1) see chapter 2 of *NOLS Expedition Planning*.

(CEP) see *Mountain Ethics* on pg. 19 of *Climbing: Expedition Planning*.

Risk Management

Contagious disease and other sickness-

Disease and other sickness is a concern in many countries around the world, especially in Cambodia. According to *National Geographic Traveler Cambodia*, vaccinations for “hepatitis A, hepatitis B, typhoid, rabies, and Japanese encephalitis” are recommended “as well as boosters for measles, rubella, diphtheria, and polio, all of which are still prevalent in Cambodia.” (NG1) Japanese encephalitis is important if I plan to visit rural farming areas, which I must assume I will, however, this time of year chances of infection go way down. Other infectious diseases found in Cambodia include cholera, tuberculosis, bilharzia, giardiasis, fungal infections, dysentery, intestinal worms, dengue fever, and malaria. In addition to this intimidating list, Cambodia also has the highest rate of HIV/AIDS in Asia. (CDC1)

Malaria is one of the biggest killers in the world, is the most common cause of life threatening illness to travelers, and is my top infectious disease concern. Symptoms of malaria are often confused with the flu including fever, chills, sweating, headaches, upset stomach, diarrhea, aching muscles and joints, and more. Sometimes fever will last a few hours before feeling better for 24-48 hours, then getting fever again. Plasmodium falciparum, the most lethal strain of malaria, can cause unconsciousness, jaundice, black urine, and anemia. Symptoms take at least seven days to start but could take as long as a few months (EH1). It is important to know the symptoms of malaria as well as other infectious disease so I can recognize the difference between something serious and something minor like travelers’ diarrhea.

The chance of getting malaria is probably moderate if no steps are taken to prevent it. Considering the possible outcome of death, even in a hospital, makes me take this seriously. If I get symptoms while on the river, I won't be able to get to a hospital very quickly and may be too weak to self-evacuate and will need to use my emergency call out procedures. Malaria can be most effectively prevented by wearing pants and long sleeves treated with a mosquito repellent, wearing a head net and keeping hands and feet covered as well. Mosquitos carrying malaria are mostly out at night, so it is important to always sleep under a net. I do not like to use deet, but I will have some on hand if I need more protection.

Dengue, also known as "break bone fever" for its pain in the head, back, muscles, and joints, is spread by mosquitos as well. Though usually not fatal in adults, there is no vaccination and the only treatments are rest, painkiller, and fever reducers. The best defense from becoming infected is by not getting bit in the first place. Unlike the mosquitos that spread malaria, dengue infected mosquitos are day feeders and are also common in urban areas (EH2), so I need to be vigilant in mosquito protection at all times, everywhere I go. Contracting dengue fever is more likely than malaria, but is less likely to be a serious life threat. Again the best way to prevent it is to avoid being bit.

According to the CDC, Japanese encephalitis virus or JEV, "is the most common vaccine-preventable cause of encephalitis in Asia..." JEV has an incubation period of 5-15 days, kills 20%-30% of infected people, and 30%-50% of survivors "have significant neurologic, cognitive, or psychiatric sequelae."(CDC2) Once infected there is no effective treatment, managing some of the symptoms and complications is the best that can be done. "Illness usually begins with

sudden onset of fever, headache, and vomiting. Mental status changes, focal neurologic deficits, generalized weakness, and movement disorders may develop over the next few days.”(CDC3) JEV is most common in rural farming areas with rice paddies or flooding irrigation. Much of Cambodia is at risk for JEV, and since I will spend a lot of time near water, I could be at risk. With the vaccination, the risk of infection is very low. In the cool dry season, when I will be there, risk of infection goes down even further. The injection costs \$240, and two of them are required, making this vaccination cost over \$500 counting gas and a ferry ticket to go get it, so I decided to skip this one raising the risk level to low. JEV is the third mosquito transmitted disease in my risk assessment making mosquitos the single biggest threat to my health and safety on this expedition.

Typhoid is fairly common in the less developed counties of the world and is usually spread because of poor hygiene. Typhoid is carried in the blood and intestinal tract and is usually transmitted when food or water is contaminated with fecal matter. Symptoms include fever, malaise, stomach pain, headache, and occasionally a rash. The most effective way to prevent typhoid is to only drink bottled or purified water, only eat peeled or cooked food, and wash hand frequently. A vaccination helps prevent typhoid but is only between 50% and 80% effective (CDC4). With a vaccination, and by making conscious and reasonably cautious decisions about food and water, I rate the risk for typhoid as low.

Schistosomiasis is a flatworm contracted through contact with contaminated fresh water. Water is contaminated when the urine or fecal matter of an infected human enters the water and infects a particular snail that lives on reeds. The snails then release tiny larva which

burrows into the skin of a human, who is then infected. Incubation is 18-84 days and symptoms include swimmers itch, fever, bloody urine, and bloody diarrhea. In rare cases, respiratory or neurological problems can develop. Treatment in a clinic is simple, but the only prevention is to avoid contact with infected fresh water (CDC5). According to the CDC, risk of infection in Cambodia is low, but due to the nature of my expedition and daily contact with water, I rate the risk as moderate. Because of the incubation period, I should be off the river and have better access to a clinic before I get any serious symptoms.

The risk of traveler's diarrhea is so high I that I fully expect to get at least a moderate case. If I have any symptoms I need to make sure to stay hydrated and have an adequate electrolyte intake. Though this is not a big deal, if ignored, dehydration could become a real issue. The best way to prevent traveler's diarrhea is to cook or peel all food, drink only bottled or properly treated water, don't use ice, avoid unpasteurized dairy products and shell fish (EH3), and above all wash hands often. Even the most careful people can't guarantee they won't get sick, and when it comes to food I am not the most careful. If there is cheese I will eat it, I will at least rinse fruit but not necessarily peel or cook it, and I enjoy eating street food and whatever the locals eat. My prevention plan is to not eat anything that is obviously questionable, only drink clean water with no ice, and cross my fingers that it won't be too bad.

River Hazards-

Traveling on a river carries some inherent dangers; of them drowning is the worst. Drowning can happen in an undefinable number of ways including becoming unconscious,

injured, tangled in weeds or rope, getting pinned, getting stuck in a strainer, or getting attacked by a giant catfish. Whatever the drowning scenario is, the single best way to mitigate this risk is to wear a PFD.

While I do not expect any rough water on my route which is south of the fault line and waterfalls on the Laos Cambodia border, there is little information on this area and it is impossible for me to know for sure. Rough or swift water increases the chance of injury so I need to be alert for any upcoming hazards such as rocks or strainers. If I do come to rough water, I will need to assess the situation and decide if the risk of scouting the river is less than just running it. Scouting would be ideal but I would then be exposed to any number of other hazards such as snakes, leeches, deep mud, spiders, and other jungle life.

Capsizing could be dangerous so I need to be sure I can self-rescue before going down stream. Most likely I will use what I have learned using a canoe. Gear will be in large mesh bags tied to the boat on rope a few feet in length so I don't have to lift the gear when righting the boat. I will then need to climb in and bail out the water. If this is not possible I will have a throw rope attached to the back of the boat that I will swim to shore with, if close enough, and pull the boat to the bank. The boat needs to be organized in a way to avoid entrapment or entanglement in rope.

For all river hazards on this stretch of river with my level of training and wearing a PFD at all times, I rate at a low possibility with the unknown being the biggest risk. A possible outcome for a mistake or accident is death, but by following these guidelines and watching the river, the biggest risks on the river are effectively mitigated.

The Human Factor-

One potential risk on this expedition is other people. Corrupt officials, thieves, scammers, criminals, and other manmade hazards are common in third world countries. For the purpose of this risk assessment, I will focus on the human risk factor while on the river. I don't know how extensively police patrol the river but they do at least portions, mostly to protect the Irrawaddy Dolphin. It is also possible because smugglers and poachers transporting anything from guns to animals use the river. Police often see tourists as a potential bribe, I have many tricks to deal with or avoid these police when on a motorcycle, but a non-motorized boat limits my current abilities. It is important to cooperate with any official, but acting like I don't understand what they want has gotten me out of bribes before. If I make it too difficult for them, or they think I will report them, it might not be worth the effort or risk, and I may be left alone. As long as I am not actually breaking any laws, failure results in paying a bribe that they were after in the first place. I don't like to pay and have personal objections to it, but will be prepared to do so if the situation requires. The likelihood this will happen is moderate but the probable worst outcome is financial loss.

Smugglers or poachers after the Irrawaddy dolphin have more potential than police to be dangerous but the likelihood of them approaching me is much less. As long as I mind my business they have no reason to care about me. Their cargo will be hidden and I won't be boarding any boat uninvited or taking pictures where I shouldn't, so the risk of interacting with smugglers and poachers is very low with a potentially negative unknown outcome. With the newer roads, transport of goods on the river is less common, and with it river pirates or bandits

will be less common as well. For pirates there is nothing I can do except try not to flaunt my gear around to avoid being noticed and cooperate, though the risk of pirates is likely very low. Since the end of the civil war, and increasing numbers of tourists, Cambodia is slowly becoming a safer country.

While I will be on the river for my expedition, petty theft is still a potential issue, though with a low risk. With the gear I am bringing, theft in urban areas is a much higher risk, but in the smaller rural villages I am likely to come across, a thief carries a high social risk. It is obvious that my equipment does not belong to the villagers, so a thief with my gear will be noticed by others. Thieves are common but are not socially accepted, so thieves will most likely not want to steal things that they can't use or sell because of the social consequences of others knowing they are losing karma by stealing. Even with a low risk, gear should not be left unattended, though if I decide to go into a village, I have had good luck in the past by paying a kid a small fee to watch my stuff. Before I leave the village I need to take a quick inventory, and if something is missing there is a chance it will be returned in a small village.

As with most paddle sports, other boats can be a hazard. Collision, being swamped or capsizing could result by not avoiding other water craft. Collision is my biggest concern as this will likely damage my boat, and potentially injure me. On the river I must assume that might is right, and try to stay out of the way. If there is a boat approaching me, I will make deliberate turns to make clear my intentions and direction. The biggest risk of collision is from a speeding boat coming around a corner, so I need to be alert at all times to hear any oncoming boat. If it

sounds fast, an option might be to get closer to shore and just wait for the boat to go by. The risk of collision is low as long as I stay alert and get out of the way.

According to Lonely Planet, “The legacy of landmines in Cambodia is one of the worst anywhere in the world, with an estimated four to six million dotted about the countryside.”(LP1) The land mine problem in Cambodia is one of the worst worldwide, with more than 40,000 Cambodians who have lost limbs. Cambodia has the highest number of amputees per capita in the world. Land mines are not the only risk of explosives; mortars, cluster bombs, artillery rounds, and other unexploded ordinance, remain a risk as well. While I have not found any information on mines near the river, I don’t believe the risk will be very high below the high water line. Any explosives in the river will likely have been moved and bumped around by the water and debris to make them detonate, if they will detonate at all.

The best way to reduce this risk of landmines is to stick to well used paths and never touch anything that looks like it could be an explosive. If somehow I accidentally walk into a mine field, the best way out is to walk out in my previous foot prints, or call for help. Lonely planet puts it best saying “better to spend a day in a minefield than a lifetime as an amputee.”(LP2) Landmine safety can be summarized in a few simple common sense rules as Lonely Planet has done best.

“-In remote areas, never leave well-trodden paths.

-Never touch anything that looks remotely like a mine or munitions.

-If you find yourself accidentally in a mined area, retrace your steps only if you can clearly see your footprints. If not, stay where you are and call for help...”

“-If someone is injured in a minefield, do not rush in to assist even if they are crying out for help – find someone who knows how to safely enter a mined area.

-Do not leave the roadside in remote areas, even for the call of nature. Your limbs are more important than your modesty.”(LP3)

Following these guidelines on this expedition, I rate the risk of mines as very low, though with potentially fatal consequences. For more information on landmines and other Human Factors, I have compiled a redundant list of government information and sources. See the section entitled *In Addition to The Risk Assessment* on pg. 45.

Animals-

While researching venomous snakes in Cambodia, I realized it was useless to try and identify them all. There are nine potentially lethal snakes in Cambodia (LP4), and the fact is that I won't be able to remember them all. Since there are several venomous snakes in Cambodia, and while not all are likely to be fatal, it is prudent to assume that every snake is venomous, and give them their space. Since landmine education has significantly reduced injuries, snake bites have taken the lead for the most amputations (LP5). According to Lonely Planet, “Many villagers go to the medicine man for treatment and end up with infection, gangrene and/or a funeral.”(LP6) If bitten I need to wash off any venom on the skin, wrap a

compression bandage around the affected limb, consider a sling (SAS), and keep going down the river to a village so I can get to a real clinic for treatment. To avoid being bit I need to watch where I step, wear pants, wear boots on land, not reach into any holes, and look in the trees for snakes as well. The only snake that deserves special treatment is the spitting cobra, identifiable by the appearance of a flattened and widened head area. It is important to keep a comfortable distance from this snake. If I am in danger of being spit on, I will shield my eyes and walk away. If the venom gets into my eyes I could be blinded and need to rinse them thoroughly with water, and seek help. As long as I don't get complacent, and try to avoid snakes the risk of a bite is low.

Mammal bites carry a risk of infection, tetanus, and rabies. Quite simply, like the snakes, all animals should be admired from a distance, however, if bitten I will thoroughly wash and treat the wound. If I decide the wound is bad enough or I suspect rabies, I will continue down river to a village and seek treatment. Tetanus and rabies vaccinations are available and while I will be up to date on both. The rabies vaccination, however, does not prevent infection, but simply extends the amount of time to get treatment, and reduces the amount of treatments needed once bitten.

(NG1) see pg. 278 in *National Geographic Traveler: Cambodia*

(CDC1) see *Health Information for Travelers to Cambodia*. (CDC2), (CDC3) see *Japanese Encephalitis*. (CDC4) see *Typhoid*. (CDC5) see *Schistosomiasis* in the *Centers for Disease Control and Prevention* website.

(EH1) see *Malaria* (EH2) see *Dengue*. (EH3) see *Traveler's Diarrhea* in *The Royal Geographical Society Expedition Handbook*.

(LP1), (LP2), (LP3) see pg. 225 in *Lonely Planet: Cambodia*.

(SAS) see *Snake Bites* in *S.A.S Survival Handbook*.

In Case of Emergency

While on the river, if there is any immediate risk to life, limb, or eyesight, I can activate the S.O.S. signal on my SPOT, though I can't expect help very fast. I will also have a phone number for Zeman McCreadie who will also be on the list help contacts for my SPOT, and will be working in Cambodia as a motorcycle guide. I won't rely on him to drop what he is doing but I would expect that he would at least have someone else come get me. Cell phones in Cambodia are cheap and there is potential for service for at least small sections of my expedition, so a cell phone is another likely option. The other important phone numbers I need are for the United States embassy in Cambodia which is 855(0)23-728-000, 117 for emergencies, and (855) 11 555 121 or (855) 16 555 248 to contact a guide service on the Mekong Discovery Trail.

If self-evacuation is the only or most practical option, staying with the boat and continuing to a village is the easiest and safest option, however if for some reason this is not possible, walking is necessary. On the west bank there are some areas with a road nearby, but if the road is missed there is a possibility of becoming lost or going back to the river. Throughout the expedition at varying distances there is a road to the east that runs north and south paralleling the river. If I had to, a walk to the road is possible, but not desirable. While self-care is always the first option or at least the first step, a clinic may be needed for more advanced treatment. The best clinics are in Pnom Pen and Siem Reap. For the beginning of my expedition

Siem Reap may be more accessible, though for the majority of the expedition Pnom Pen to the south is almost certainly the better option.

I will be sending out an O.K. message from my SPOT every day when I get to where I will be camping. I have had messages not get sent in the past, so one day of no messages is no reason to panic. I have lost a SPOT in the past and it took a solid day and a half on a motorcycle to get to the first phone, so I am hesitant to say that two days without a message is reason for concern. Three days however, is an indicator that I may be in trouble, in which case the embassy should be contacted.

Training, Conditioning, and Experience

I always try to maintain a minimum level of physical fitness, sometimes more successfully than others. For an expedition into a country that is largely unfamiliar such as mine, an appropriate fitness level is not just a recommendation, but in my opinion, a requirement. When mistakes are made, plans fail, and extra ordinary circumstances are presented, physical fitness may be the only thing left to fall back on.

In preparation for this expedition, I have been in the gym three times a week for most weeks since the 27th of August. I almost always work on cardio, trying to go farther or faster than the previous time. I usually use the elliptical or treadmill in the gym, and sometimes run a three mile route at night. I am less concerned with strength training, but usually work on strength 2-3 times a week, most often trying to add repetitions opposed to weight. Some strength training exercises I often do include curls, bench press, shoulder shrugs, and calf presses.

On the 15th of October my focus in the gym changed to marshal arts training which has been good for strengthening my core as well as provide good training to defend myself in the unlikely event of being attacked. We almost always start the session with some push-ups, sit-ups, jumping jacks, core exercises like the “plank” and “superman”, as well as good stretches and a mix of some other exercises.

While I don't know for sure what kind of boat I will be paddling, there is a good chance it will be some kind of canoe paddled with a single blade. To better prepare myself for this I got

my BCU 3-star award and 4-star training with Rob Yates. This was very good training for my expedition and I am now much more confident in my abilities as a canoeist. I learned about poling which I will use in shallower waters, and lining which is a safer way to navigate any unlikely rapids I come across. All my strokes have improved and are more efficient, I practiced reading the river and predicting what is coming, and I can better handle a canoe in rough water, wind, and rapids.

In addition to my recent training, I have past experience and training which helps to qualify me to attempt this expedition. I have had training as an EMT, wilderness first responder, combat lifesaver, and in the self-treatment of wounds. I have military experience as a Forward Observer for a scout/sniper platoon in the Army, search and rescue training, an intro to swift water rescue, and I am a senior in the Expeditionary Studies program. I have had survival and navigation training in several places for jobs, school, volunteer organizations, and the military. I have also spent time in or traveled through 22 countries for nearly two years counting my time in Iraq, most of which are less developed countries. Most of these countries I have been to are in Latin America where I rode alone on my motorcycle for seven months.

Physical fitness, discipline specific training, and experience will never be perfect because they can always be improved or added to. The best that anyone can do is to prepare for the task at hand, and hope they have prepared enough. I believe my level of training, both physically and discipline specific, meets or exceeds what is necessary for expected conditions and activities as well as the inevitable unexpected issues that will arise.

Nutrition

In planning for this expedition, I am faced with a large amount of uncertainty when planning a menu. I won't know for sure what foods will be available and what will travel well in a canoe until I get to Cambodia and see what the markets have to offer. The only food item I can be completely sure I will take with me down the Mekong is rice.

Since energy comes from food, performance is greatly affected by what is eaten. Even if maximum performance is not high on the list of priorities, proper nutrition will make any outdoor activity more enjoyable by improving mood, energy, and willingness to spend that energy on having a good time. A well fed body is less likely to be adversely affected by hot or cold injuries such as heat stroke or hypothermia, and is better equipped to fight off illness. A solo trip down the Mekong as I have proposed will have psychological effects of being alone in an environment I am not used to, so a good diet could be the difference of keeping high spirits, clear thinking, and a healthy body.

The body gets its energy stores from calories which come from carbohydrates, fats, and proteins, each of which have a specific role to play in the smooth performance of the body. Carbs provide energy for short and moderate durations of activity, fat reserves fuel long term energy output, and proteins help the recovery and growth of muscles. (FOH) It is difficult to know for certain what I will be eating on my expedition in Cambodia but getting enough carbs will not be an issue as I will eat plenty of rice. Rice is a staple food in Cambodia and is so important to the people that the Khmer word for 'eat' directly translated means 'to eat rice'

(LP). Normally I would not plan to eat the same thing every day, but for this expedition I do plan to eat rice as the main portion of at least one meal a day. For sources of fats and protein I will search for canned foods containing meat or fish, nuts, and other packaged foods. I am also bringing enough powdered protein to supplement my diet with at least 20 grams of protein for each day of my expedition.

The average person needs 1,500-2,500 calories per day but I plan on a minimum of 3,000. Since carbs are easiest for the body to metabolize, I plan to consume up to 70% of my calories from carbs, while fats and proteins should consist of no more than 25% for each (FOH). While in Cambodia I may not be able to read nutrition facts on all the food, if it is present at all, so planning meals to a science may not be possible. In this case, as a rough guideline, I will plan for a minimum of two pounds of food per day with a high carb load. Supplemental vitamins will also be taken to augment the nutritional intake from food.

(LP) see *Food and Drink* in *Lonely Planet: Cambodia*.

(FOH1), (FOH2) see *Food* in *Mountaineering, The Freedom of the Hills*.

Equipment

Since the right equipment is often essential to a successful expedition, and is even more often the difference between an enjoyable or miserable time, it behooves me to figure out what I need to bring on this expedition before I actually leave. When I don't have a piece of equipment I want to use, especially if I just forgot it at home, it bothers me every time I need it. What's worse is it could threaten the success of the expedition, and poetically my life. I plan to succeed but prepare for failure, and certainly I plan to live, so a good start would be to make a list of "... all materiel and items used in the equipment, support, and maintenance of military forces." (DOD1). By replacing "military forces" with "expedition planner", I have a good idea of the things that must be considered. In short, everything needs to be considered. To organize my thoughts and ensure I have or can get everything, I have written a list of all the equipment I need well before the expedition to ensure it is complete and to allow ample time for any additions or alterations.

In addition to creating a simple list, I need to figure out the logistics of supplying an expedition down the Mekong River. Logistics is, according to the Department of Defense "The procurement, distribution, maintenance while in storage, and salvage of supplies, including the determination of kind and quantity of supplies." (DOD2). This starts with a good list of what I have as well as what I need. The "procurement" is where and how I will get supplies and equipment. Most of it is as simple as bringing my personal gear from home, but I may need to borrow some, and others will be purchased in Cambodia.

(DOD1), see *Supplies*, and (DOD2) *Logistics* in the DOD dictionary.

Equipment List

Need to get in country	Visa	Buy	Borrow
Boat		Vaccinations	2 Throw lines
2 Paddles		Meds (anti diuretics/ malaria, ect.)	
Food		Phrase Book	
Water and Containers			
Stove Fuel			
MAP			
Machete			

Clothing (all synthetic)	Sleep System	Health and Sanitation
2 LS Shirt	Sleeping Bag Liner	First Aid Kit w/ meds
2 SS Shirt	Bivy Sack	Soap
Shorts	Hennesy Hammock	Wag Bags
Pants	Sleeping Bag	Toilet Paper
Hat with neck protector	Head Lamp	Hand Sanitizer
Hiking Boots		Sun Screen
Sandals		Bug Repellent
4 Pair Socks	Getting Around	Head Net
Gaiters	Compass	Vitamins
Rain Gear, Top and Bottom	Maps	Sun Glasses
Med. Weight Warm LS	GPS	
Fleece Hat	Phrase Book	
Work or Riding Gloves	Guide Book	
Vest	Calculator	
Cooking		Paddle Specific
Alcohol Stove		PFD w/ Whistle
Pot/Pans		Water Shoes
Eating Utensils		
Hot Sauce		
Water Bottles		
Miscellaneous	Ziploc Bags	Saw

Pack Towel	2 Contractor Bags	SPOT Satellite Tracker
Waterproof note pad & pencil	Flash Light	Documents
Journal and Pens	550 Cord	Camcorder
Water Tablets	2 Knives	Tripod
Matches	Electrical & Gorilla Tape	Mesh Bags
Lighter	AA and AAA Lithium Batteries	
Striker w/ Whistle & Starter	Solar Panel	

Budget

All costs are specific to my proposed expedition and do not include the rest of my time in Cambodia.

Flight- \$1750

Boat/paddles- \$150-\$200. This is an estimation given to me by Ken Preston who is the author of boatsandrice.com and knows someone who bought a boat in Laos for \$150.

Food-\$75-\$100. According to Lonely Planet, "Local meals and street eats" cost 1-2 dollars a meal. This estimation is based off a worst case 1-2 dollars a meal, though will likely be less since I will be cooking it myself. I am, however, willing to splurge on some food that may cost more than standard meals.

Visa- \$40. This is for my initial entry and visa extension.

Hennessy Hammock- \$200. I was given a 50% off pro deal for my expedition and this is the price after my discount.

Solar Charger-\$125

Other gear/clothing-\$100

Other in country costs including bus tickets, taxi, tuk-tuk, hotel/hostel- \$80-\$125. According to Lonely Planet, busses are \$2-\$3 per 100 kilometers and taxis are about \$9 for a 30 minute ride. Tuk-tuks fall somewhere in the middle of this scale. I can get a cheap place to sleep from \$5-\$10 a night.

Total Approximation- \$2,640

In addition to the risk assessment

This section is not to be read alone, but in addition to the **Risk Assessment** for the reader who would like more information, specifically on the *Human Factor* section. I have put this section at the back of this proposal as it is more of a redundancy to what I have already stated, however, given the severity of some of the material covered, redundancy is often necessary.

The Cambodia travel information below was taken directly from the government travel advice sites of the U.S., Australia, Canada, Germany, the U.K., and New Zealand. Most are quotes that may be of concern for my expedition, though most risks listed are minor or easily avoided. The link directly to the page the information is from is at the end of each section.

United States

“Land mines and unexploded ordnance are found in rural areas throughout Cambodia, and especially in Battambang, Banteay Meanchey, Pursat, Siem Reap, and Kampong Thom provinces. Travelers in these regions should never walk in forested areas or even in dry rice paddies without a local guide.” I will not be in these provinces as part of my expedition. “Areas around small bridges on secondary roads are particularly dangerous. Travelers should not touch anything that resembles a mine or unexploded ordnance;”

http://travel.state.gov/travel/cis_pa_tw/cis/cis_1080.html#safety

Australia

“Banditry and extortion, including by military and police personnel, continue in some rural areas, particularly at night in areas between Snoul, Kratie and Stoeng Treng in the north-eastern provinces.”

“Piracy occurs in the coastal areas of Cambodia. Armed gangs have robbed boats in recent times.” I won’t be on the coast. This is relevant because there is no mention of the river.

“Landmines remain a danger in many parts of Cambodia, especially along the border with Thailand. Large areas of rural Cambodia are still contaminated with unexploded ordnance. Visitors to the north and northwest of Cambodia should not stray from clearly marked pathways. Exercise caution if travelling beyond the Angkor Wat temple complex to outlying temples in Siem Reap.” My Expedition takes me nowhere near the border with Thailand or anywhere in the northwest.

“We advise you to exercise normal safety precautions.” This means to “Exercise common sense and look out for suspicious behavior, as you would in Australia.” This is not a serious warning against Cambodia.

<http://smartraveller.gov.au/zw-cgi/view/Advice/Cambodia>

Canada

“Cambodia remains one of the most heavily mined countries in the world. Landmines can be found in rural areas, especially in Banteay Meanchey, Siem Reap (except in the town of Siem Reap and the Angkor temples which are safe), Battambang, Kampong Thom, and Pursat provinces. The border area with Thailand is especially dangerous. Do not walk in forested areas or in dry rice paddies without a local guide. Areas around small bridges or secondary roads are dangerous. Do not visit outlying temples, particularly in the areas of Phnom Kulen and the River of a Thousand Lingas, as they are heavily mined. Strictly observe warning signs and do not handle any unknown object.” My expedition will be in the Stung Treng and Kratie provinces, which are not listed and are not near the Thai border.

“Pirate attacks occur in coastal waters, and in some cases, further out at sea. Mariners should take appropriate precautions.” Again, no mention of the Mekong.

“Banditry continues, largely at night, in rural areas and on routes between Snoul, Kratie and Stung Treng in the northeastern provinces.” I will be traveling between Stung Treng and Kratie, though not on the roads where bandits find easier targets.

http://voyage.gc.ca/countries_pays/report_rapport-eng.asp?id=46000

Germany

“The most extensive landmine contamination is in the area known as the K5 mine belt, which stretches 700 kilometres along the border with Thailand and is as wide as 500 meters in places. While the local population is aware of the hazard, the shortage of arable land forces

them to farm even suspected contaminated areas, where accidents cause many casualties. In other parts of the country there are small minefields usually containing only a few mines, which were planted during the fighting also with the aim of terrorizing local communities.”

<http://www.auswaertiges-amt.de/EN/Aussenpolitik/HumanitaereHilfe/Minenraeumen/Minen-Kambodscha.html>

U.K.

The U.K. site has section about travel by river and sea. There is no mention of pirates or landmines on any rivers.

“Cambodia remains heavily affected by landmines and unexploded ordnance. Mined areas are frequently unmarked. Do not stray off main routes in rural areas, including around temple complexes.”

<http://www.fco.gov.uk/en/travel-and-living-abroad/travel-advice-by-country/asia-oceania/cambodia#safetySecurity>

New Zealand

New Zealand has a shorter section on Cambodia and says nothing I haven't already read in several other places.

<http://safetravel.govt.nz/destinations/cambodia.shtml>

Nongovernment sources on similar topics

“Cambodia is a safe and friendly country, with the usual exception for large cities late at night, particularly Phnom Penh, and unobserved luggage or wallets. Bag snatching, even from those on bicycles and motorcycles, is a problem in Phnom Penh. Be discreet with your possessions, especially cash and cameras, and as always, take extra care in all poorly lit or more remote areas.” This is what all sources have said. This is common sense, and is expected in all countries, especially in under developed countries.

“Cambodia suffers from a legacy of millions of land mines left during the war years. However, to tourists, land mines present a minimal to nonexistent threat, as most areas near touristed areas have been thoroughly de-mined. Many tourists mistake electric or sewage warning signs along national highways for land mine signs. HALO Trust, a leading mine removal organization in Cambodia asserts that you would have to drive through the jungle for at least an hour north of Angkor Wat to come across any mines. The threat is to locals in extremely rural areas who rely on subsistence agriculture for their livelihoods.”

http://wikitravel.org/en/Cambodia#Stay_safe

I have also read the safety information on crime and landmines in other sources including *National Geographic Traveler: Cambodia* and *Dos and don'ts in Cambodia*. All sources say roughly the same things about landmines, though some are more complete. I will not be in areas most affected by mines and have found no warnings about mines on the Mekong or in the provinces of my expedition, though around small rural bridges could be a danger area which I will avoid. I will follow the simple advice of the several sources I have given. In

addition, I have had formal training in the military to identify explosives and went to an anti-mine demonstration in Columbia. On this expedition, I would rate the risk of landmines at very low.

I have found no instances of piracy on the Mekong River in Cambodia in post war times, though my own experience and common sense has taught me this is a possibility, so I have included it in my risk assessment.

References

- Anderson, Dave & Absolon Molly. (2011). *NOLS Expedition Planning*. Mechanicsburg, PA. Stackpole Books.
- Ajango, Deborah. (2000). *Lessons Learned: A Guide to Accident Prevention and Crisis Response*. Assn for Experiential Education.
- British Canoe Union. (2008). *Canoe and Kayak Handbook*. (3rd ed.). Wales: Pesda Press.
- Brown, Gordon. (2010). *Sea Kayak: A Manual for Intermediate and Advanced Sea Kayakers*. Great Britain: Pesda Press.
- Cambodia Travel Map. (4th ed.). (2011). Periplus Editions.
- Central Intelligence Agency. (2012). The World Fact Book, East and Southeast Asia: Cambodia. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/cb.html>
- Centers for Disease Control and Prevention. (2012). Health Information for Travelers to Cambodia. Retrieved from <http://wwwnc.cdc.gov/travel/destinations/cambodia.htm>
- Connel, H. (Director). (2008). *Small Voices: The Stories of Cambodia's Children*. [Motion Picture]. USA: Displaced Yankee Productions.

DOD Dictionary of Military and Associated Terms. (2010). Supplies, Supply Definitions. Joint Publication 1-02. Retrieved from http://www.dtic.mil/doctrine/dod_dictionary/

Dowd, John. (1997). *Sea Kayaking: A Manual for Long-Distance Touring*. Seattle: University of Washington Press.

Eng, R. C. (Ed.). (2010). *Mountaineering, The Freedom of the Hills*. (8th ed.). Seattle: The Mountaineers, 2010.

Explorers Corner. Indochina: Discover Vietnam, Laos & Cambodia by Kayak; Paddle the Pearls of Southeast Asia. Retrieved from <http://www.explorerscorner.com>

Glass, Michael & Priest, Simon. (1997). *Effective Leadership in Adventure Programming*. Human Kinetics Publishers.

Glatzer, J. (Director). (2003). *The Flute Player* [Motion Picture]. USA: PBS.

Goodrich, G. & Pokorny, T. (2001). *North East Mountains, Leave No Trace Skills and Ethics*. Boulder, Colorado: Leave No Trace Center for Outdoor Ethics.

Hill, D. (2005). *Dos & Don'ts in Cambodia*. Thailand. iGroup Press.

Lonely Planet. (2012). Introducing Cambodia. Retrieved from <http://www.lonelyplanet.com/cambodia>

Lemkin, R. (Director). (2009). *Enemies of the People* [Motion Picture]. Cambodia: Old Street Films/Thet Sambath.

McCreadie, Zeman. Primary Source. Global Enduro/ Cambodia Expeditions Expedition Leader.

O'Bannon, A. & Clelland, M. (2001). *Allen and Mike's Really Cool Backpackin' Book*.
FalconGuide.

O'Shea, M. (2007). *In the Naga's Wake: The First Man to Navigate the Mekong, from Tibet to the South China Sea*. Allen & Unwin Pty., Limited.

O'Shea, M. (2004). The First Ever Full Mekong Descent By Kayak. Retrieved from
<http://www.outdooreyes.com/photosession23.php3>

Panh, R. (Director). (2003). *S21: The Khmer Rouge Killing Machine* [Motion Picture]. France:
MK2 Diffution.

Pran, Dith & DePaul, Kim. (1999). *Children of Cambodia's Killing Fields: Memoirs by Survivors*.
Yale University Press.

Preston, Ken. (2012). Wooden Boats of the Cambodian Mekong River. Retrieved from
<http://www.boatsandrice.com/index.html>

Ranges, Trevor. (2010). *National Geographic Traveler: Cambodia*. National Geographic.

Ray, Nick & Bloom, Greg. (2012). *Lonely Planet: Cambodia* (8th ed.). Lonely Planet.

Soles, Clyde & Powers, Phil. (2003). *Climbing: Expedition Planning*. Great Britain.
Mountaineers Books.

The Weather School. "The Weather Cycler, For Interpreting and Forecasting Your Weather".

Thailand-United States Educational Foundation (TUSEF/Fulbright). (2012). Exploring the Mighty
Mekong: A Comparison with the Lewis and Clark Voyage. Retrieved from
http://www.fulbrightthai.org/fulbrighthay/pdf/LEWIS_AND_CLARK_VOYAGE.pdf

Twight, Mark F. (1999). *Extreme Alpinism*. Seattle: The Mountaineers.

WebFinance, Inc. (2012). Supplies Definition. Retrieved from
<http://www.businessdictionary.com/definition/supplies.html>

Wikipedia. (2012). Cambodia. Retrieved from <http://en.wikipedia.org/wiki/Cambodia>

Wikipedia. (2012). Ernest Doudart de Lagrée. Retrieved from
http://en.wikipedia.org/wiki/Ernest_Doudart_de_Lagr%C3%A9e

Wikipedia. (2012). Francis Garnier. Retrieved from

http://en.wikipedia.org/wiki/Francis_Garnier

Wikipedia. (2012). Mekong. Retrieved from <http://en.wikipedia.org/wiki/Mekong>

Winsor, Shane. (2004). *The Royal Geographical Society Expedition Handbook*. Profile Books.

Wiseman, John. (2004). *S.A.S Survival Handbook*. New York: Harper Collins Publishers.

World Waterfall Database. (2012). Khone, Chuts de. Retrieved from

<http://www.worldwaterfalldatabase.com/waterfall/Khone-Chutes-de-105/>

Year Zero. (2012). Year Zero: The Silent Death of Cambodia. Retrieved from

<http://yearzerodoc.com/>

